

Using Art and Dialogue to Promote  
the Emotional Awareness of Kindergarteners

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## ABSTRACT

### Using Art and Dialogue to Promote the Emotional Awareness of Kindergarteners

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This study investigated the effects of an intervention on the emotional awareness of 4- to 6-year-olds enrolled in kindergarten classes. Sixteen children in one classroom formed an experimental group and fourteen children in a second classroom formed a control group.

Children in the experimental group engaged in a 5-week intervention, focusing on emotional awareness, specifically naming various emotions and their causes, suggesting solutions to problems evoking anger or sadness, and identifying mixed emotions. To support emotional awareness, children were engaged in drawing their own and others' emotions, discussing the causes of the emotions they had drawn, and proposing solutions to problems. In the final session, children participated in a group discussion of emotions evoked by art (museum paintings).

Pretest and posttest measures were children's drawings and descriptions of (1) their own emotions, (2) a negative emotion expressed by a character in a photograph, and (3) mixed emotions of a character in a story. Children's drawings were scored for facial features associated with the emotion. Their descriptions were coded and scored for the identification of emotions and their causes, and when relevant, for resolution to problems. ANCOVAs on posttest scores (summed across tasks) did not show a significant group difference on drawing, but the experimental group scored higher than the control group on description at posttest. Qualitative analyses showed the causes of children's happiness were often social and that children provided more elaborate causes from pretest to posttest. Children's contributions to discussions about museum paintings revealed that children talk about emotions (i.e., their own, in artwork) when observing realistic and abstract paintings.

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## **Review of the Literature**

Children's emotional well-being is important in its own right and also has positive effects on children's academic performance and social relationships (Coppock, 2007; Grewal & Salovey, 2006; Pahl & Barrett, 2007). The classroom is arguably an ideal place to foster emotional well-being since children spend the majority of their day at school, and have numerous opportunities to learn about emotions: resolving conflicts during recess, persisting in academic challenges, and developing friendships are just a few examples.

While school curricula typically recognize that social-emotional development is important, they may not indicate to teachers how to foster such development or may fail to suggest creative and fun ways to explore emotions with children. Moreover, pressure to meet academic demands or inadequate professional training may lead teachers to avoid emotional content in their teaching (Hyson, 2004). Consequently, social-emotional development is often left up to chance, leaving many children to deal with emotional difficulties on their own. Ultimately, a child's behaviour, academic success, and perspectives of self, school, and others can be affected.

The current study investigated the use of art and dialogue to promote social-emotional awareness in a mixed-age kindergarten class (children ranging in age from 4 to 6). Prior to presenting the study, I will (1) examine the different terms and definitions used to describe social-emotional skills in the literature, (2) outline some benefits of having social-emotional skills, (3) describe the social-emotional development of young children, and (4) identify current social-emotional development programs. Furthermore, I will discuss the use of arts to promote social-emotional well-being. This will include a description of arts education in the curriculum in Ontario (where my study took place), the benefits of visual arts towards facilitating social-

emotional development, and specific art programs that target social-emotional development in children.

### **Emotional Intelligence and Social-Emotional Competency**

In the current literature on children's emotional development, both the terms *emotional intelligence* (a term used interchangeably with *emotional literacy* by some authors) and *social-emotional competency* are used. The term emotional intelligence seems to have gained popularity in the 1990s, although the concept of it has a longer history. According to Mayer et al. (2011), in 1921, Jung suggested the idea of understanding the world through emotions and much later, in 1984, Steiner asserted that the awareness of emotions was important to individual well-being. Similarly, in the 1990s, Gardner developed the idea that people have multiple intelligences, including intrapersonal intelligence, which involves the awareness of feelings (as cited by Mayer et al., 2011). Inspired by these thinkers and the literature on intelligence, psychologists Mayer and Salovey (1990) suggested the term emotional intelligence and defined it in terms of four main components, as indicated in Table 1.

The four components are (1) empathy and understanding of others, (2) management of emotions to facilitate cognitive activities and behaviour, (3) positive interpersonal relationships, and (4) awareness and expression of emotions. In short, emotional intelligence entails having an awareness and understanding of one's own emotions and using that understanding to manage behaviour, regulate emotions, enhance thinking, and make judgements (Mayer, Salovey, Caruso, & Cherkasskiy, 2011; Mayer, Salovey, & Caruso, 2004). These skills are used to initiate and maintain interpersonal relationships (Pahl & Barrett, 2007), as well as to demonstrate empathy and understanding of others (National Scientific Council on the Developing Child, 2004, as cited by Brouillette, 2010). Although researchers differ in how they define terms, they all appear to

agree that emotional intelligence plays an important role in promoting well-being throughout the lifespan.

The components of EI relate closely to social-emotional and emotional competency as discussed in the developmental psychology literature. According to Denham (2006), the three main components of emotional competency are expression, knowledge, and regulation. As Table 1 illustrates, these components of emotional competency parallel those discussed in the emotional intelligence literature. In sum, emotional competency, much like EI, involves the expression of and identification of emotions and their causes, as well as the monitoring and modifying of emotions to help oneself (Denham, 2006; Denham, Zinsser, & Bailey, 2011). While these three components of emotional competency do not include skills related to social interactions (i.e., empathy and positive interpersonal relationships), Denham often refers to how having emotional competency helps children socially and academically. Additionally, others have discussed social and emotional competency together (as indicated in column 2 of Table 1).

Table 1

*Components of Emotional Skills*

	<b>Emotional intelligence</b>	<b>Social-emotional competency</b>	<b>Emotional competency</b>
<b>Principal component</b>			
Empathy and understanding of others	Empathize <sup>a</sup>	Comprehend others' emotional states <sup>e</sup>	
	Detect emotions in others <sup>b</sup>	Show empathy for others <sup>e</sup>	
		Demonstrate caring and concern for others <sup>f</sup>	
Management of emotions	Use emotions to prioritize thinking in productive ways <sup>c</sup>	Manage strong emotions and their expression in a constructive manner <sup>e</sup>	Monitoring feelings <sup>h</sup>
	Generate emotions as aids to judgment and memory <sup>c</sup>	Regulate one's own behavior <sup>e</sup>	Modifying feelings to help oneself <sup>h</sup>
	Stay open to feelings <sup>c</sup>	Manage aggression and conflict <sup>g</sup>	

	<b>Emotional intelligence</b>	<b>Social-emotional competency</b>	<b>Emotional competency</b>
	Reflectively monitor and regulate emotions to promote emotional and intellectual growth <sup>c</sup>		
	Problem solve, reason, make decisions <sup>b</sup>	Set and achieve positive goals <sup>f</sup>	
	Manage emotions, motivate oneself <sup>d</sup>		
	Control impulses and delay gratification <sup>d</sup>		
	Regulate one's moods and keep distress from swamping the ability to think <sup>d</sup>		
Positive interpersonal relationships	Manage emotions both internally and in the context of interpersonal relationships <sup>b</sup>	Establish and maintain relationships <sup>f</sup>	
		Engage in cooperative, pro-social behaviour <sup>g</sup>	
		Initiate and maintain peer friendships and adult relationships <sup>g</sup>	
Self-awareness, including recognition and expression of emotions	Perceive accurately, appraise, and express emotion <sup>a</sup>	Identify and understand one's own feelings <sup>e</sup>	Identify one's own and others' feelings <sup>i</sup>
	Identify and express emotions in one's physical states, feelings, and thoughts as well as other people, artwork, language, etc. <sup>c</sup>	Recognize and manage emotions <sup>f</sup>	Identify causes and consequences of emotions <sup>i</sup>
	Label emotions and recognize simultaneous feelings <sup>c</sup>		Express nonverbal messages about social situations <sup>h</sup>
	Understand relationships associated with shifts of emotions <sup>c</sup>		

*Note.* Superscripts refer to authors citing the particular skills, as follows: <sup>a</sup> Mayer & Salovey (1997), as cited by Weinberger (2002); <sup>b</sup> Grewal & Salovey (2006); <sup>c</sup> Mayer & Salovey (1997), as cited by Mayer, Salovey, Caruso, & Cherkasskiy (2011); <sup>d</sup> Goleman (1995), as cited by Weinberger (2002); <sup>e</sup> Brouillette (2010); <sup>f</sup> Payton, Weissberg, Durlak, Dymnicki, Taylor, Schellinger, & Pachan (2008); <sup>g</sup> Squires (2002), as cited by Pahl & Barrett (2007); <sup>h</sup> Denham, Zinsser, & Bailey (2011); <sup>i</sup> Denham (2006)

### **Benefits of Emotional Skills**

Researchers have shown that having positive social-emotional skills is beneficial from early childhood to adulthood. For example, Pahl and Barrett (2007) cite several studies showing that preschoolers' social-emotional skills predict school success and the quality of peer relationships. Generally, children who are socially and emotionally well adjusted do better in school; they have more resiliency to stressors, develop healthy coping skills after upsets, and are better equipped to learn (Pahl & Barrett, 2007).

Coppock (2007) found that children aged 9 and 10 benefitted from participating in an educational program targeting social-emotional skills. They developed a better understanding of themselves and others and exhibited higher self-esteem and confidence as they felt more in control of themselves and their emotions. They learned to take on the perspectives' of others and be empathetic, skills that Coppock claimed led the participants to have more fulfilling relationships.

Studies with middle and secondary school students show that those with higher emotional intelligence experienced less social anxiety and depression (Grewal & Salovey, 2006). They also exhibited less antisocial behaviour such as aggression, and were less likely to engage in the use of tobacco or illicit drugs or overconsumption of alcohol. They were also more likely to be supportive towards their peers and maintain close relationships. This may be because emotional abilities allow one to communicate feelings, understand another's feelings, empathize, forgive, and manage emotions and conflict (Grewal & Salovey, 2006).

Furthermore, emotional intelligence is associated with positive effects on mental health in adults. The ability to manage one's emotions, a component of emotional intelligence, correlates negatively with depression (Grewal & Salovey, 2006). Being aware of one's emotions and

knowing how to regulate stress by problem solving and self-soothing may allow individuals to develop resiliency when facing challenges (Pahl & Barrett, 2007). An emotionally intelligent person can motivate herself/himself, persist when stressed, and regulate mood so that stress does not diminish the ability to problem solve or cause impulsive reactions (Goleman, 1995, as cited by Weinberger, 2002).

### **Social-Emotional Development in Early Childhood**

While social-emotional skills continue to develop throughout life, teachers need to understand the typical capabilities of children during different periods in order to have developmentally appropriate expectations. As the current study involved children in the kindergarten years, the focus in this section is on development just before or during this period. In Canada, children have the option of attending kindergarten for two years (depending on the province, the years are referred to as year 1 and 2, junior and senior kindergarten, or pre-kindergarten and kindergarten).

During this time, children learn, practice, and acquire many social skills in a new environment that expands their social circles and experiences. Children learn how to interact in a group with adults and peers, in a setting other than their home (Wilson & Wilson, 2015). Socially, children learn to make and maintain friendships and to interact with peers positively and respectfully. They learn how to cooperate through play, empathize with others, take another's point of view, and identify solutions to problems.

These social skills are intertwined with children's emotional development. Children are aware of their emotions by early childhood. They develop the ability to regulate their emotions and behaviours for particular purposes, such as persisting in a difficult task, using self-talk to motivate themselves, or resisting negative emotions that harm others. They begin to understand

more complex emotions such as pride, gratitude and anxiety, or a mix of emotions (Best Start Expert Panel on Early Learning, 2007). These emotional competencies are elaborated below.

### **Awareness of Emotions in Early Childhood**

Children's emotional development progresses in early childhood as their cognitive and linguistic abilities grow. One area of emotional development that comes with increased thought processing, language, and memory skills is the awareness of emotions. Generally, kindergarten children's emotions are expressed genuinely and spontaneously. However, once emotional awareness is present, children can think more clearly about how to express their feelings and remember and reflect on past emotional situations (Wilson & Wilson, 2015). They also become aware that emotions can be felt but not expressed or even hidden, and that two people may experience and assess the same emotional situation differently (Bretherton, Fritz, Zahn-Waxler, & Ridgeway, 1986).

Part of an awareness of emotions is identifying their causes. In one study investigating 3- to 5-year-olds' knowledge of causes, the children were more likely to identify happy emotions in others than negative emotions, but were more accurate in providing causes for the negative emotions (Fabes, Eisenberg, Nyman, & Michaelieu, 1991). The authors proposed that children might recognize causes of negative emotions more accurately because negative emotions can be intense and the situations leading to them can be threatening. This explanation is supported by Wilson and Wilson (2015), who claim that children ages 3 to 5 anticipate negative emotions and can avoid a situation that causes them or use positive thoughts to self-soothe when negative emotions arise.

Other studies have examined the nature of the causes for emotions given by children. In a study of 3- to 5-year olds, children were asked to give causes for emotions shown on a puppet's

face (Denham & Zoller, 1990). The causes children gave were then coded as social or non-social. Seventy percent of the causes given for happiness were non-social, such as material goods, environmental events, or playing alone. The remaining 30% of causes children gave were social, such as participating in or sharing experiences with others during an interaction. On the other hand, children were more likely to give social than non-social causes when the puppet displayed sadness (70% of causes) or anger (90% of causes) (e.g., exclusion by others, fighting).

Further emotional development occurs during the preschool years. For example, the basic instinctive emotions of happiness/joy, anger, and sadness are still present, but children are better able to control these emotions (Wilson & Wilson, 2015). Children also develop *self-conscious emotions* such as embarrassment, guilt, and pride. These require an awareness of oneself as well as of others, and depend on social experiences in order to develop. Other emotions such as love, anger due to frustration, sympathy, and empathy also require exposure to social experiences (Wilson & Wilson, 2015). For a child who has not yet developed self-awareness because of lack of socialization or adult guidance, these self-conscious emotions may be underdeveloped.

### **Labeling of Emotions**

As children develop an awareness of emotions, they simultaneously begin to talk about them. Toddlers have already started labeling emotions. For example, one-third of 20-month-olds could properly label physiological states (e.g., pain, hunger, sleep), as well as past and future emotions (e.g., happy, sad) and their causes (Bretherton, McNew, & Beeghly-Smith, 1981, as cited by Bretherington et al., 1986). In a later study of 28-month-olds, 90% could label emotional and physiological states (Bretherton & Beeghly, 1982). Furthermore, the ability to name emotional states (using emotional and physiological words) was related to language



competence.

Although children ages 3 to 5 years have been shown to label basic emotions such as happiness and sadness in prototypical facial expressions accurately (Widen & Russell, 2003), they are not yet entirely accurate in recognizing emotions. In one study, for example, children this age recognized sadness in facial expressions better than they recognized anger (Denham & Couchoud, 1990). In fact, emotion categories may still be somewhat fuzzy for young children, especially for negative emotions (Denham, 2006). Widen and Russell (2003) also reported that 3- to 5-year-olds used happiness as a blanket term for other positive emotions, such as excitement or surprise. The authors concluded that children first largely categorize emotions as either positive or negative, and eventually discriminate subtypes of positive and negative emotions as cognition develops and via social experiences. Others have pointed out that accurate labeling of facial expressions is related to knowledge of emotion words, age, and awareness of distinguishing facial features for each emotion (Brechet, Baldy, & Picard, 2009).

### **Depicting Emotions**

In another study of emotional awareness, children ages 4 to 8 were asked to depict an emotion by adding a facial expression to a predrawn face and by drawing a human figure (Cox, 2005, as cited by Brechet et al., 2009). On the face completion task, children accurately depicted happiness by ages 4-5 years and sadness by 6-7. They had more difficulty depicting emotions of anger, surprise, fear, and disgust. In drawing a human figure, children followed a similar sequence; depicting emotions was weak at ages 4-5, but improved with age, starting with correctly depicting happiness, sadness, and then anger and surprise. It was suggested that to help children graphically depict emotions more accurately, they should be provided with the context of the emotion through a story. In keeping with this idea, the intervention in my study taught

children about emotions through informative sessions and let them explore emotions through drawing and talking about them.

### **Early Childhood Curricula: The Role of Emotional Intelligence/Social-Emotional Learning**

In Ontario, where the present study took place, the province-wide full day kindergarten curriculum includes six areas of learning: personal and social development, language, mathematics, science and technology, health and physical activity, and the arts (Ontario Ministry of Education, 2010). In particular, the personal and social development learning area encompasses learning expectations in the areas of social and emotional development. According to the social development section of the curriculum, children in kindergarten are expected to identify and use social skills, to problem-solve in various situations, and to understand social diversity. In the emotional development section, children are expected to develop a sense of positive self-identity; to practice independence, self-regulation and responsibility; and to demonstrate awareness of their environment. Specifically, the curriculum mentions that children should “be aware of and label their own emotions” (Ontario Ministry of Education, 2010, p. 65) as part of learning about self-regulation. Additionally, the curriculum denotes that confidence, independence, and perseverance are emotional skills that kindergarten children are expected to demonstrate by the end of their two years in the program. As mentioned in previous studies, self-esteem, confidence, resiliency, and social skills such as perspective-taking and empathy, are qualities and skills manifested by socially and emotionally well-adjusted children (Coppock, 2006; Pahl & Barrett, 2007). Clearly, the curriculum recognizes the importance of emotional awareness, its relation to personal and social development, and the necessity of teaching these skills to foster well-being in children.

Many programs currently exist that can be used by teachers to encourage the development of emotional skills. Some of these are commercially available and come with program guides and resources as well as training classes for educators. The Fun FRIENDS program (Pahl & Barrett, 2007), for example, focuses on teaching kindergarten-aged children how to problem-solve in social situations, use physical calming techniques, restructure thinking through taking on positive perspectives, seek support from family and friends, and cope with fears. Using play-based activities such as role-playing, puppets, games, story telling, music, movement, and art (art type or activity not specified), children have shown less anxiety after participating in the program (Pahl & Barrett, 2007).

Another program, RULER, for children from kindergarten to grade 8, aims to develop five emotional skills: recognizing emotions, understanding the causes of emotions, labeling emotions, expressing emotions appropriately, and regulating emotions (Rivers, Tominey, O'Bryon, & Brackett, 2013). RULER integrates tools into the regular classroom curriculum, such as a 'Mood Meter', which encourages students to notice their emotions throughout the day and to label them with emotional vocabulary; a Meta-Moment, which teaches students to reflect and choose a positive decision versus an impulsive reaction to an emotion; and a Blueprint, which helps students to take on another's perspective when problem-solving. According to Rivers et al. (2013), students in this program have shown improvements in social skills and academics.

While the numerous programs available encompass a variety of approaches to promote student well-being, there is little documentation of programs that use art specifically to teach emotional intelligence. In a recent review of ten social-emotional curricular programs, only one program, the PALS program, clearly used art (drama with puppets) to teach prosocial behaviours

and problem solving skills (Joseph & Strain, 2003). Many others use visuals but do not use art techniques. For example, Second Step uses photo cards of social situations to induce discussion about social skills. Programs primarily using drawing and painting to promote emotional intelligence are missing in the literature. This is surprising given that drawing is a common activity for young children and can be an effective way to help children express and explore their feelings (Hall, 2009).

### **Integration of the Arts in Education**

According to a review of arts education by the Elementary Teachers' Federation of Ontario (Upitis, 2011), the arts are broadly defined as activities of interest that evoke passion because of the fulfillment they bring. Upitis extends the definition of art to encompass not only fine and performing arts (painting, writing poetry, singing, acting), but also less traditional activities such as outdoor arts (kayaking, swimming, hiking), and domestic arts (cooking, sewing, carpentry).

With this broad list of stimulating activities, one can imagine that art education would appeal to many students. Art challenges students mentally, emotionally, physically, and spiritually, and keeps them captivated and actively participating. When students are fully engaged, their learning is most active and they are able to produce meaningful work with persistence until its completion. For these reasons, the arts are an important entity in the school curriculum (Upitis, 2011). Techniques and expression of art forms may be taught separately but may also be used to excite students about other subjects. Learning about arts and through arts allows students to imagine, wonder, create, and learn (Upitis, 2011). Students get the chance to channel their creativity and take risks through their work.

In the literature, researchers typically define the arts more narrowly, as visual and

performing arts. Some studies have examined the benefits of children engaging in visual art. For example, drawing gives children practice in expressing themselves and thereby develops their communication skills (Department for Education and Skills, 2008, as cited by Hall, 2009). However, drawing is often seen as an indicator of cognitive development (e.g., Goodenough-Harris Draw-a-Person test) (Short, De Ornellas, & Walrath, 2011) or as a pre-writing skill and not acknowledged for its contribution to other valuable skills. In a qualitative study of preschool teachers' use of art activities in their classroom programs, many teachers recognized the benefits of art for fine motor skill development and acknowledged art activities as a way for children to practice language when talking about their work (Kocer, 2012). Only a few teachers recognized art as a means of promoting creativity and self-expression of ideas and emotions and only a few discussed the use of art as a means of developing social skills (e.g., when children share materials during the activities). In drawing, children can explore their ideas, feelings, and environment in another dimension besides written or oral communication (Hall, 2009).

Further research has shown the benefits of arts for academic performance, even for young adults. In a study of the benefits of visual-art exposure (including a writing task, an art-viewing task, a creative drawing task, and a tracing task), university students showed increased memory in a word-recall task after engaging in the drawing activity (Rosier, Locker, & Naufel, 2013). The authors concluded that art and creative activities may support the processing of information that can help students in their studies.

In another study, Winner (2007) analyzed arts education in two high schools. Interviews with teachers and recordings of lessons indicated several 'habits of mind' that students practice when engaging in art activities like drawing. For example, students learned to (1) observe the world in detail and think of colour, line, texture, and style, (2) envision from imagination, (3)

reflect on problems and solutions based on goals, (4) question and explain their work through answering open-ended questions, (5) evaluate their own and others' work throughout the working process, consultations and critiques, (6) express themselves, (7) stretch their comfort zone, take risks and learn from mistakes, (8) engage and persist over time and overcome struggles, and (9) see art as a way to participate and communicate in society.

### **The Use of Art to Support Emotional Development**

Given the benefits of art in education, certain educators and developers of educational programs have considered the value of art in fostering emotional intelligence. Social-emotional programs using various art forms are now being incorporated into classroom programs to promote emotional intelligence. One of these programs is the Teaching Anger Control Through Teamwork, or ACTT, for kindergarten to grade 5 students. Using writing, drawing, music, poetry, and peer discussions, the program aims to teach students anger management by identifying situations that make them angry and the behaviours and feelings that occur when these situations arise. A creative journal for drawing and writing is used by each child to express his or her emotion management process and its' progress. ACTT recognizes that the arts increase student participation in the program and are a valuable way to teach students to recognize, express and manage their feelings (Wallin & Durr, 2002).

Recent application of the Reggio Emilia pedagogy in kindergarten classrooms also acknowledges the importance of children's self-awareness, including emotional awareness. The Reggio Emilia pedagogy focuses on the teacher and children collaborating on projects where children are learning to express themselves, their thoughts, and their feelings. Schuster (2000) has proposed a curriculum to teach children to identify and represent their feelings and thoughts using art and the Reggio Emilia pedagogy. The curriculum process involves using photographs

to discuss feelings with children and giving children opportunities to observe their own facial expressions in a mirror, draw self-portraits, and share their work and emotions with peers. This curriculum incorporates multiple processes to engage children of different intelligences. As Schuster (2000) claims, observing facial expressions, expressing emotions through oral or written stories, and drawing pictures of emotions appeal to children with bodily-kinesthetic, linguistic, and spatial intelligences. In the program she developed, children learned about emotional awareness through individual explorations of art rather than through uniform teaching.

Current research by the Yale Centre for Emotional Intelligence and the philanthropic Botín Foundation uses art to support emotional intelligence. The centre suggests that children can practice emotional awareness through art appreciation: they visit museums and then discuss the museum artwork and the emotions they evoke. This practice encourages them to recognize emotions in themselves and in the colours and forms in the artwork, to notice how people can have different emotions about the same artwork or experience, and ultimately, to use this awareness to express themselves creatively. The developers of the education program believe that using artwork to discuss emotions provides a safe psychological distance for people to gain perspective about an emotion in a comfortable manner (Ivcevic, Hoffmann, & Brackett, 2014). It is also their belief that this practice encourages emotional skill development and that having emotional intelligence helps to inspire creativity.

### **The Present Study**

According to the theory of emotional intelligence (hereafter, EI) (Mayer et al., 2011, 2004) and research on social-emotional development (Coppock, 2007; Denham, 2006; Grewal & Salovey, 2006; Pahl & Barrett, 2007), elaborated above, there are intrapersonal and interpersonal benefits of developing emotional skills. Although research on the use of art to foster EI or

social-emotional competency is limited, a couple of studies suggest that art might aid young children in developing emotional awareness (Ivcevic, Hoffmann, & Brackett, 2014; Schuster, 2000). This possibility was explored in the present study by examining the effects of an intervention designed to raise the emotional awareness of kindergarteners through visual arts and dialogue, and by engaging children in discussion about emotions in museum art.

Learning about emotional awareness is a developmentally-appropriate expectation for kindergarteners (Ontario Ministry of Education, 2010). Teachers, such as myself, are in a good position to encourage social-emotional skill development given that they witness and address students' daily social-emotional concerns in varying situations at school. At the same time, teachers need strategies for supporting children that are both effective and feasible to integrate into the classroom. In the present study I examined the effects of an intervention designed to meet these criteria. To evaluate the effects, I conducted a quasi-experimental study with kindergarteners from two classrooms, with one class receiving the intervention (experimental group) and the other acting as a control group. I hypothesized that the children receiving the intervention would have higher overall scores at posttest than the control group on tasks measuring the drawing of emotions. More specifically, I expected that the group receiving the intervention would include more facial features in their drawings at posttest. I also predicted that the experimental group would have higher overall scores on descriptions of their drawings at posttest compared to the control group, due to improvements in (a) stating the causes of emotions, (b) stating a solution to a social problem evoking negative emotions, and (c) labelling and providing the causes of mixed emotions. The discussions of museum art were exploratory. I anticipated that children in the experimental group would be more responsive at posttest in labelling emotions in the museum art and expressing their interpretations of and associations



with the art.

## **Method**

### **Design**

This study used a quasi-experimental design, involving two kindergarten classes in the same school. Children in one class received the intervention, while children in the other class formed a control group. In both groups, data were collected only for children who gave assent and whose parents consented to their participation (see Participants and Recruitment for details). Data analysis included statistical tests of group differences and qualitative analysis of children's drawings, descriptions of drawings, and museum art discussions.

### **Site**

The study was carried out in a suburban, kindergarten to grade 5 school in Ontario. The school is a dual language (French and English) school, but in kindergarten, instruction is solely in English. The school provides a full-day kindergarten (FDK) program that includes Year 1 and Year 2 kindergarten students in the same classes (in Ontario, the two-year kindergarten program is optional). Currently, there are seven kindergarten classes, and children in each class range from ages 4 to 6. The kindergarten classes typically include a high percentage of children learning English as a second language or learning English simultaneously with another language.

I have been a teacher at this school for four out of the nine years of my teaching career with the Peel District School Board, where this school is located. While I have taught kindergarten for the past nine years, during a couple of those years, I taught kindergarten for half a day and grade three physical education and health or drama the other half. At the time I carried out the present study, I was on leave from my position for graduate studies.

FDK was introduced in Ontario in 2010 and rolled out gradually, with the program

commencing at this school in the fall of 2013. The program's philosophy is in promoting learning from an early age by engaging children in learning activities with their peers for a full day. FDK incorporates play-based learning through which children explore, experiment, and create activities, with the teacher scaffolding and inspiring inquiry. Each FDK class is managed by a certified teacher and an early childhood educator (Ontario Ministry of Education, 2011). The teaching staff of each classroom organizes the schedule and activities in consideration of the children's development needs and interests and the mandatory curriculum.

### **Participants and Recruitment**

I recruited participants from two classrooms that I had recently worked in as a supply teacher and thus had an established rapport with the children. The teachers from the two classes had similar teaching experience (about five years experience in a Kindergarten classroom) and their classrooms were adjacent to each other in a pod-style. Once classes had been chosen, information letters and consent forms were distributed to the two staff members of that class and to the children to take home to their parents (see Appendix A).

Participants included the teachers and the children whose parents provided consent. Sixteen parents (of 26) gave consent in the experimental group (8 boys, 8 girls). Fourteen parents (of 24) gave consent in the control group (10 boys, 4 girls). Teachers provided these participants' date of birth and the children's ages were calculated in SPSS in months. The mean age in the experimental group was 66.63 months ( $SD = 4.79$ ) and 65.21 months ( $SD = 7.01$ ) in the control group. An independent samples  $t$ -test was done to compare the ages in the two groups, and was not significant:  $t(28) = 0.651, p = .520$ . Although demographic information was not collected, based on personal knowledge of the school, I estimate that the majority of children had been exposed to at least one other language besides English at home.

## **Piloting of Procedures**

The first portion of the pre- and posttest measures (described at length below) was piloted in a daycare with eight 4-year-old children. Written consent by parents was obtained for all pilot participants. Children were given a blank white sheet of 9 x 12 inch paper and a container of mixed-colour crayons. They were prompted to draw a response to the question, “How do you feel today?”. After the children were finished drawing, I asked each child individually to tell me how they were feeling and what made them feel that way. I transcribed each child’s words verbatim. The drawings and transcriptions informed the procedures in the present study.

## **Intervention: Dialogue, Art, and Description Sessions**

The broad purpose of the intervention was for the children to learn about emotional awareness through discussion and then to explore their own feelings through the process of creating and talking about the artwork. The intervention consisted of five sessions. Four sessions included a group dialogue (D), an art response (A), and a description of the art by the child (D), and are referred to as 'DAD' sessions. One session included only a group dialogue. Each session’s objective was for children to learn about an aspect of emotional awareness, such as the expression of emotions, emotional terms, and the causes of and responses to emotions. These skills are ones that are continuing to develop between the ages of four and six years old, as described in the literature review.

A summary of the DAD sessions is provided in Table 2. As the table shows, for DAD sessions 1 to 4, children engaged in a group discussion and then individually created a drawing response. When the child completed the drawing, I individually asked the child to describe the drawing (e.g., “What feeling is in your picture?”, “What made you feel that way?”, and when applicable, “What could you do to feel better?”) and I transcribed each child’s words verbatim as

he or she spoke. I audio recorded children's responses as a backup for the purpose of the study. Once children had finished both the drawing and description tasks, they were directed to a separate table to share their drawing with other children who had finished. Once they were finished sharing, the children engaged in classroom activities decided in collaboration with the teachers until all children were finished. For the fifth DAD session, children only participated in a group discussion about museum art.

Table 2. *Objectives, Materials, and Procedures for the Five DAD Sessions*

Objective	Materials	Dialogue	Art or response by child
1. Identify emotions from facial expressions (in the story).	Book: <u>The Way I Feel</u> (Cain, 2000)	Read book.  Discuss emotions and the facial features that characterize each expression.	Prompt: We just talked about all these feelings from the book (show pictures). Can you draw a face with one of the feelings? (Give example.)  Art: Drawing a self-portrait depicting an emotion of their choice.
2. Identify the cause of a negative or positive emotion.	Photos of a character in a situation that evokes a negative or positive emotion (see Appendix D)	Discuss emotions expressed in photos. Discuss possible causes of emotion.	Prompt: Think of a time when you felt one of these feelings. (Show photos.) What made you feel like that? (Remind them of example given in dialogue.) Draw your face with the feeling and then draw what made you feel like that.  Art: Drawing a facial expression and the situation that caused them to feel that emotion.

Objective	Materials	Dialogue	Art or response by child
3. Generate solutions to problems that cause negative emotions.	Photos of situations where character encounters a problem (see Appendix D)	Discuss negative emotions expressed in photos.  Discuss response to negative emotion (solution).	Prompt: Think of a time when you had a problem that made you feel badly like this character. (Show photos.) What could you do to feel better about the problem? Draw your face with the feeling. Then, draw the problem and what you did to feel better.  Art: Drawing a problem that caused a negative emotion and the solution to the problem.
4. Express mixed feelings.	Scenarios where children may feel mixed emotions (see Appendix D)	Discuss the idea of having mixed emotions about something.	Prompt: Think of a time that made you feel both a happy and unhappy feeling. Draw the feelings on a face and then draw what made you feel like that.  Art: Drawing of mixed emotions and something that causes them.
5. Discuss emotions evoked by museum art.	Images of museum paintings (see Appendix D)	Discuss emotions portrayed in the artwork.	Prompt: Look at the museum art. What do you see? How does it make you feel? What does it make you think of?  Response: Discussion of emotions.

## Materials and Procedures

**Pre- and posttest measures of children's emotional awareness.** Three measures were used to assess children's individual emotional awareness: (1) a self-portrait depicting the child's

own emotion and subsequent description by the child, (2) a drawing and description of a negative emotion, and (3) a drawing and description of mixed emotions. These measures reflect the objectives of DAD sessions 1 to 4. Each child completed the three measures individually with me to eliminate the influence of other children on their responses. I followed the same procedures for each child, as follows:

(1) For the self-portrait, I gave a verbal prompt (“Draw a big face with how you feel today and then draw what made you feel like that”). After the child drew the picture, I asked the child to tell me about it (“What feeling is in your picture?” followed by “What made you feel that way?”). I transcribed the child’s words verbatim as he or she spoke (a practice I often used in my own classroom prior to conducting this study). I also audio recorded the sessions of children whose parents had given permission to check my hand transcription when needed. After the transcription was done, I proceeded to the next activity.

(2) I showed the photo of a character in a situation that evokes a negative emotion (see Appendix B). Then, I prompted the child to draw a picture (“Draw how the girl felt on a face”). After the child drew the picture, I showed the photo again and asked the child to tell me about the emotions depicted (“How did the girl in the picture feel?” followed by “What made her feel that way?”). If the child described a negative emotion, I asked him or her what the character should do about the problem to feel better (“What could the boy do to feel better?”). I transcribed the child’s words verbatim as he or she spoke and also audio recorded the session for children whose parents had given permission. A photo depicting a similar situation and emotion was shown to the children for pre- and posttest measures.

(3) Then, I read a scenario about a character experiencing mixed emotions (see Appendix B). I prompted the child to draw the facial expressions of the emotions he or she believed the

character in the scenario felt (“How does she feel? Draw the feelings she felt on a face. You can use more than one face if you want to”). I asked each child to describe the drawing (“How did the girl in the story feel?” followed by “What made her feel that way?”). Since identifying two emotions and their causes was predicted to be a challenging task for this age group, I gave an additional prompt (“Does she have any other feelings?”) to allow them to elaborate on the verbal response if only one emotion and cause was originally stated. Each child’s words were transcribed and audio recorded as for measures 1 and 2. Scenarios describing similar situations and emotions were read to the children for pre- and posttest measures.

Each of the pre and posttest measures was preceded by an assent prompt: “Do you want to tell me now about your picture?” When this was asked to the first three children tested, they immediately described their picture rather than providing assent for sharing their response. The prompt was then reworded to: “Are you ready to tell me now about your picture?”

**Coding and scoring of pre- and posttest measures of emotional awareness.** The three measures just described to assess children's emotional awareness were each coded for (a) drawing of the features of facial expressions and (b) the emotional content of their descriptions of the drawings. These are discussed in turn.

(a) There are distinctive facial expressions for emotions, involving the position and shapes of the mouth, eyebrows, and eyes (Ekman, 1993). Following Ekman (1993) and a coding scheme by Brechet et al. (2009) provided in Table 3 (below), I examined the children's drawings to determine if the child was aware of how emotions are expressed facially. Each of the facial features described in Table 3 received 1 point (maximum score of 2 for self-portrait and negative emotion tasks, maximum score of 4 for mixed emotion task).

Table 3

*Coding System for Facial Expressions Depicted by Children in their Drawings*

Emotion	Facial features
Happiness, interest, pride	Mouth: smile Eyebrows/eyes: absence of features described for sadness, anger, and fear below (happiness is associated with wrinkling around the eyes but drawing this is unrealistic for children this age)
Sadness, guilt, shame, disappointment	Mouth: downturned Eyebrows: inner corners raised OR Eyes: with tears
Anger	Mouth: straight or downturned, showing teeth Eyebrows: inner corners lowered
Fear	Mouth: opened or zigzagged Eyes: Wide open

*Note.* Facial features coding adapted from Brechet et al. (2009)

(b) For each of the three tasks, I examined each child's verbal description of the drawing for emotional content. More specifically, I determined whether the child labeled emotions and identified their causes. For the negative emotion task, I also looked at whether children generated solutions to problems. For the mixed emotion task, I assessed whether children labeled both emotions and their causes. The coding that was used is provided in Table 4.

For the "self-portrait/own emotion" task, the maximum score was 2: identifying the emotion (1 point) and stating a cause (1 point). For the negative emotion task, the maximum score was 3: identifying the emotion, stating the cause, and generating a logical solution (each 1 point). For the mixed emotion task, the maximum score was 4: identifying two emotions and stating two causes (also, each one point). When a child gave a logical but unelaborated response for the cause or solution, only half a point was given (e.g., "Solve the problem"). A half point was also given for giving a cause but misinterpreting the question (e.g., "Angry because I saw she was yelling").



Table 4

*Coding System for Analyzing Emotional Content in Descriptions of Drawings*

Emotional content	Description of drawing
Emotion (E)	Accurately labels emotion (e.g., of self, others or in artwork).
No or Incorrect Emotion (E-0)	Uses a non-emotion word (e.g., funny) or does not accurately label emotion (e.g., says sad for angry)
Cause (C)	Talks about the cause of an emotion (e.g., uses causal words such as 'because', 'how', and 'why') (e.g., He is sad because he misses his mom).
Cause - Unelaborated (C-unelab)	Gives unelaborated or vague cause that is logical (e.g., talks about something happening or someone doing something, without specifying who or what).
Cause - Unclear or Circular (C-unc)	Gives cause but misinterprets the question, or refers to the drawing as the cause of an emotion (e.g., I'm happy because I'm smiling).
Cause - No causal explanation (C-0)	Does not give an explanation for the cause of the emotion (e.g., "I don't know").
Solution (S), scored for negative emotion task only	Talks about a logical solution to feel better or resolve a problem that caused a negative emotion.
Solution - Unelaborated (S – unelab)	Gives unelaborated or vague solution that is logical (e.g., talks about solving the problem without specifying how to solve it)
Solution - Unclear (S - unc)	Gives solution but misinterprets the question (e.g., gives solution relevant to a different character)
Solution – No solution (S-0)	Does not provide a solution to the problem
Mixed emotions (M), scored for mixed emotion task only	Talks about mixed emotions.

After I had scored all the drawings and descriptions for the three tasks, I trained a graduate student to score a subset of the data. The coder independently scored 20% of the pretests, selected at random, and 20% of the posttests, also selected at random. Inter-scorer

agreement was 95% for both the drawings and descriptions, indicating excellent agreement. I reviewed all disagreements to ensure that the scoring was accurate but no adjustments were needed to the original scoring.

**Pre- and posttest measure of museum art discussions.** Additionally, children participated in a group activity intended to explore what children say about emotions when observing museum art. This measure reflects the objectives of DAD session 5 and occurred after the individual measures described above were completed.

For this task, I showed several pictures of museum art (see Appendix C). As the appendix shows, museum art of similar subject matter and by the same artist was shown to children for the pre- and posttest measures. For each picture, I asked the following questions to the group: “What do you see?”, “How does it make you feel?” and “What does it make you think of?” Young children have been found to have difficulty in identifying emotions in abstract paintings that older children and adults agreed showed the emotions of sadness, anger and calmness (Jolley & Thomas, 1994). However, the children in this study had intervention sessions to teach them about emotions, potentially leading them to be more sophisticated in emotional awareness, and thus in their responses to both realistic and abstract art. The group session was video recorded, with only the children who had video consent in view. Children who only had audio consent were sitting outside the camera’s viewfinder and could only be heard. Participants who did not have audio or video consent did not participate in the pre- or posttests for this measure.

## **Results**

The study involved analysis of the following: the measures of children’s emotional awareness from the pre- and posttests and the discussions of museum art.

## Measures of Emotional Awareness

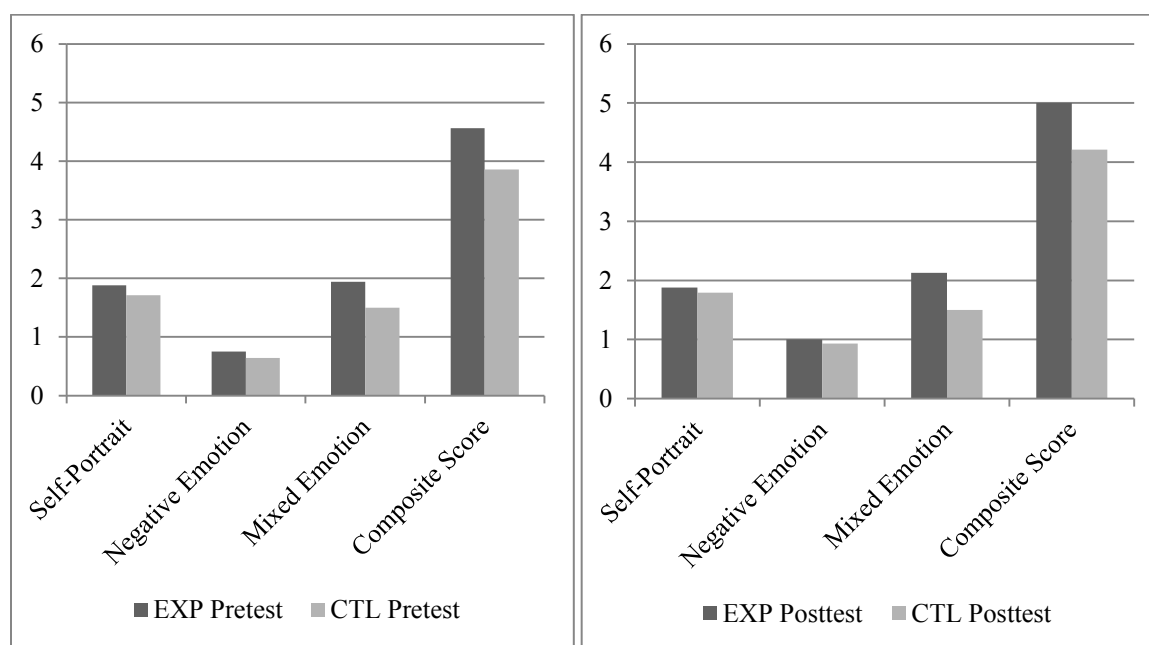
**Descriptive statistics.** Table 5 shows the means and standard deviations for pretest and posttest drawing by task (self-portrait, negative emotion, mixed emotion) and summed across the tasks to a composite score. Figure 1 displays the same mean scores in graphic form to facilitate comparison between the experimental and control groups.

Table 5

### *Drawing Scores by Task, at Pretest and Posttest*

	Self-Portrait		Negative Emotion		Mixed Emotion		Composite Score	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
<b>EXP</b>								
Mean	1.88	1.88	0.75	1.00	1.94	2.13	4.56	5.00
SD	0.50	0.34	0.68	0.73	0.44	0.89	0.81	1.10
<b>CTL</b>								
Mean	1.71	1.79	0.64	0.93	1.50	1.50	3.86	4.21
SD	0.47	0.43	0.84	0.62	1.02	0.76	1.79	1.25

*Note.* EXP = Experimental group ( $n = 16$ ); CTL = Control group ( $n = 14$ ). Maximum scores were 2 for self-portrait, 2 for negative emotions, 4 for mixed emotions, and 8 for the composite.



*Figure 1.* Drawing mean scores at pretest (left) and posttest (right). *Note.* EXP = Experimental group ( $n = 16$ ); CTL = Control group ( $n = 14$ ).

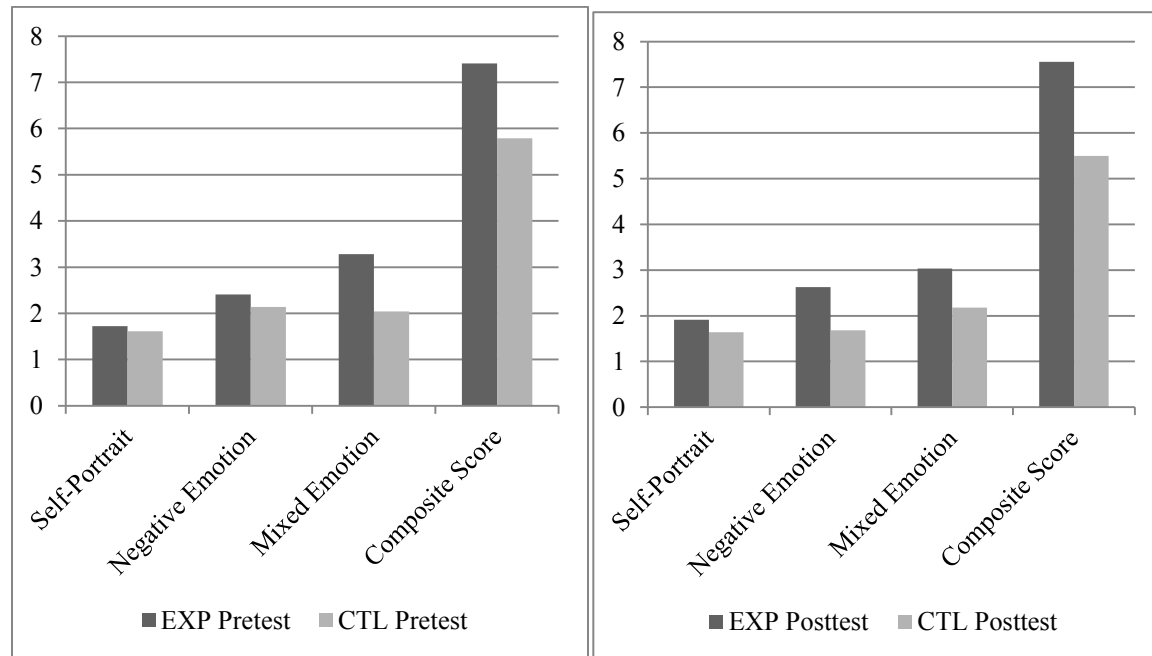
In Table 6, the means scores and standard deviations for children's description of their drawings are presented for pretest and posttest by task and summed across the tasks to a composite score. In Figure 2, the same description mean scores are displayed graphically.

Table 6

*Description Scores by Task, at Pretest and Posttest*

	Self-Portrait		Negative Emotion		Mixed Emotion		Composite Score	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
EXP								
Mean	1.72	1.91	2.41	2.63	3.28	3.03	7.41	7.56
SD	0.52	0.27	0.61	0.56	0.98	1.10	1.32	1.21
CTL								
Mean	1.61	1.64	2.14	1.68	2.04	2.18	5.79	5.50
SD	0.63	0.41	0.84	0.95	1.20	0.99	2.16	1.57

*Note.* EXP = Experimental group ( $n = 16$ ); CTL = Control group ( $n = 14$ ). Maximum scores were 2 for self-portrait, 3 for negative emotion, 4 for mixed emotions, and 9 for the composite.



*Figure 2.* Description mean scores at pretest (left) and posttest (right). *Note.* EXP =

Experimental group ( $n = 16$ ); CTL = Control group ( $n = 14$ ).

For the description scores, children were asked to identify the emotion they had drawn and give causes for it. Considering the points for causes across tasks, children in the experimental group received a mean score of 3.03 ( $SD = 0.81$ ) at pretest and a posttest score of 3.34 ( $SD = 0.60$ ), out of 4 possible points. The control group received a pretest score of 2.29 ( $SD = 1.16$ ) at pretest and a score of 2.32 ( $SD = 0.80$ ) at posttest.

**Group comparisons.** The pretest and posttest scores were examined to determine whether they met normality assumptions for analysis of covariance (ANCOVA). At pretest, the drawing and description scores were not normally distributed on the self-portrait, negative emotion, or mixed emotion tasks, for either the experimental or control group. These scores were therefore not appropriate to use as covariates in ANCOVA. However, the composite scores (shown in Tables 5 and 6) were normally distributed for the control group, and skewness and kurtosis statistics showed that the violations of normality for the experimental group were not extreme. Moreover, the assumption of homogeneity of regression slopes for ANCOVA was tested and met, indicating that the relationship between the pretest and posttest scores was similar across the two groups for both the drawing and description composite scores.

Given the findings just above, ANCOVA was acceptable and conducted on each of the two composite scores: (1) drawing, with pretest drawing as a covariate and (2) description, with pretest description as a covariate. For the ANCOVA on the drawing score, age was also entered as a covariate given that this variable correlated with the drawing pretest composite score for the control group:  $r_s = .385$ ,  $p = .035$ . Age did not correlate with the drawing pretest composite for the experimental group or with the description pretest composite for either group.

The first ANCOVA did not show a significant group difference at posttest for the

drawing score:  $F(1, 26) = 1.53, p = .227$ . The second ANCOVA showed a significant group difference at posttest for the description score:  $F(1, 27) = 8.05, p = .009$ , adjusted  $R^2 = .620$ . As is standard in ANCOVA, the tests of difference between the groups were conducted on the adjusted means (i.e., the means taking into account the covariate), shown in Table 7.

Table 7.

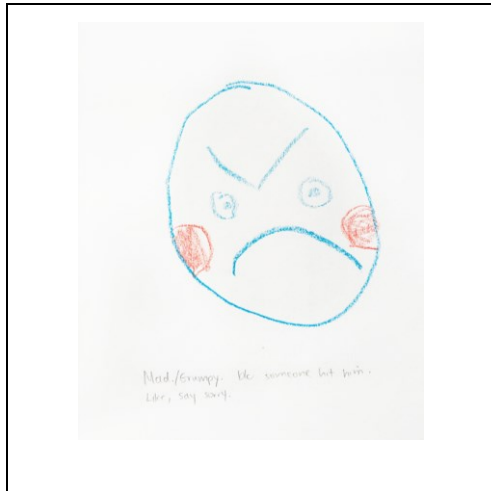
*Adjusted Means for Drawing and Description Composite Scores at Posttest*

	Mean	SE	95% CI
Drawing			
EXP	4.87	0.27	4.31–5.43
CTL	4.36	0.29	3.76–4.97
Description			
EXP	7.17	0.28	6.60–7.74
CTL	5.95	0.30	5.34–6.57

*Note.* SE = Standard Error, CI = Confidence Interval, EXP = Experimental (n = 16); CTL = Control (n = 14)

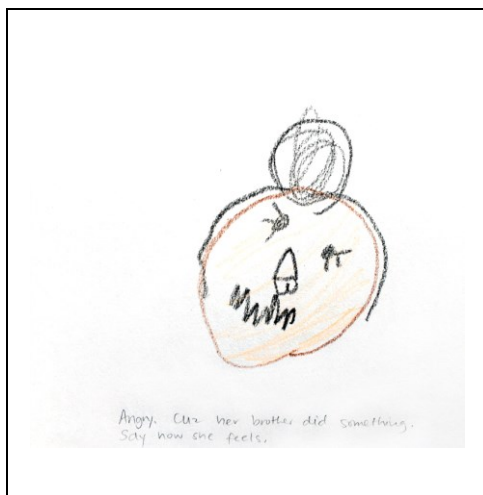
**Observations of drawings.** For the self-portrait task, the majority of children (collapsing across groups) drew a happy face: 83% at pretest (with faces described as happy or in fewer cases, funny), and 83% at posttest (with faces described as happy, funny, or excited). Notably, for a happy face, an upturned mouth was sufficient to be scored as happy, as long as the eyes were relatively neutral (i.e., did not show features associated with anger or sadness). The remainder of the children drew a sad or angry face on the self-portrait (20% at pre and posttest). They also drew sad and angry faces in response to the negative emotion task and sometimes on the mixed emotion task. In contrast with the happy face drawings, children received lower scores on sad and mad faces based on the coding system, but still included critical features. For the sad faces, most children included a down-turned mouth to represent sadness, but did not draw sad eyes (i.e., tears or eyebrows with the inner corners raised) required to receive the maximum

score. Many children also used a down-turned mouth for anger or a straight mouth, and occasionally included mad eyes (i.e., eyebrows with the inner corners lowered) and elements such as a flushed face (see Figure 3).



*Figure 3.* Downturned mouth, angry eyebrows, and flushed face to depict anger

Some children used an open or zigzag mouth for anger (Figure 4); these depictions received a score of zero since the mouth shapes reference a scared emotion rather than an angry one.



*Figure 4.* Zigzag mouth to depict anger.

**Observations of descriptions.** As the reader will recall, children were asked to identify the emotions they drew and to give causes for the emotions. Their responses are provided next by task (when a child used a peer's name, the name has been replaced by a pseudonym). Given that the groups were not different according to the statistical comparisons broken down by task, most of the analyses collapse across the two groups.

***Self-portrait.*** All children correctly labelled happy faces when they drew one. The causes the children gave for feeling happy in their self-portraits involved social interactions or relationships about half the time (53% pretest, 48% posttest, across two groups). Examples of some social causes included: receiving gifts (“my dad buy’ed me a car from Toys R Us”), playing (“I was playing with my friends”), quality relationships (“My sister is hugging me”, “My friend listened to me, what I was saying”, “My brother makes me feel happy”), achievement (“Well, me, Ibrahim and Ehan wrote the morning message together”, “Me and Iman built a school together”) and class activities (“I’m working with you”, “There was Jungle Sports and I never tried Jungle Sports before”). Other causes given for feeling happy were non-social, often referring to a child playing on their own (“I sliding down the slide at the park”, “When I feel happy, I play with my toy trucks and see movies”). While children rarely depicted themselves as sad, when they did, the causes were: physical injury (“I got hurt. I fell down on the grass and I got a boo boo”) and disputes in relationships (“Peoples not letting you play and laughing at you”, “I don’t want to play with him because him so mean to me”).

For the self-portrait description, some children in both groups showed more elaborate causes from pretest to posttest. An example from the experimental group is shown in Figure 5. The verbatim handwritten descriptions of children’s drawings are included in the pictures and are typed in the figure notes.



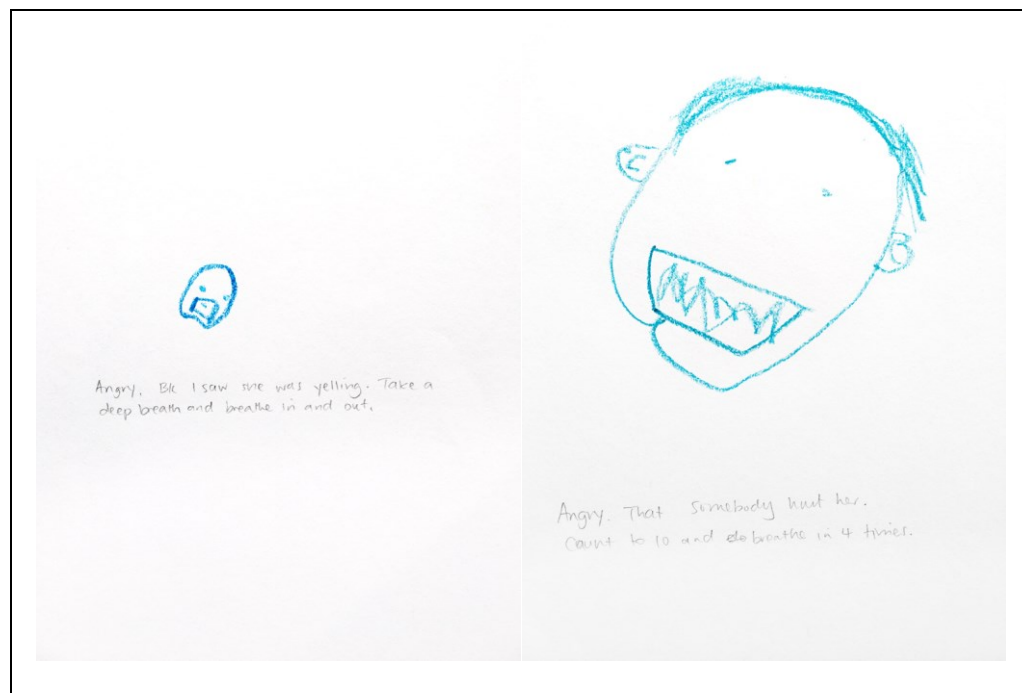


*Figure 5.* Self-Portrait by same child showing elaboration of causes from pretest (left) to posttest (right), respectively dictated as “Happy. By playing”; and “Excited because I was making my own purse.”

**Negative emotion.** For the negative emotion task, most children correctly labelled the depicted emotion as anger (90% of children at pretest, 67% at posttest). When children did not say angry as the emotion, they suggested another negative emotion, specifically, sad. Some children in both groups gave more elaborate causes during the negative emotion task, as was found for the self-portrait. In Figure 6, for example, the child explained at pretest why he thought a character in the story was angry (“because I saw she was yelling”), while at posttest he expressed a reason for the emotion the character felt (i.e., “angry ...that somebody hurt her”).

As part of the negative emotion task, I also asked the children to give a solution to solve a problem (i.e., “What could the girl do to feel better?”). Some children gave solutions that involved attempts to regulate emotions such as the ones shown in Figure 6 (“Breathe in and out”, “Count to 10”). Others similarly referenced independence in problem-solving but focused on communication (“Ask, can I have the guitar now?”, or “Say, I was using it, could you give it

back?”). Yet other children gave solutions that depended on others to resolve the negative emotion (“Tell the teacher”, “Someone make her happy”). Finally, some children gave general responses that did not indicate a solution that the child could execute (“Solve the problem”),

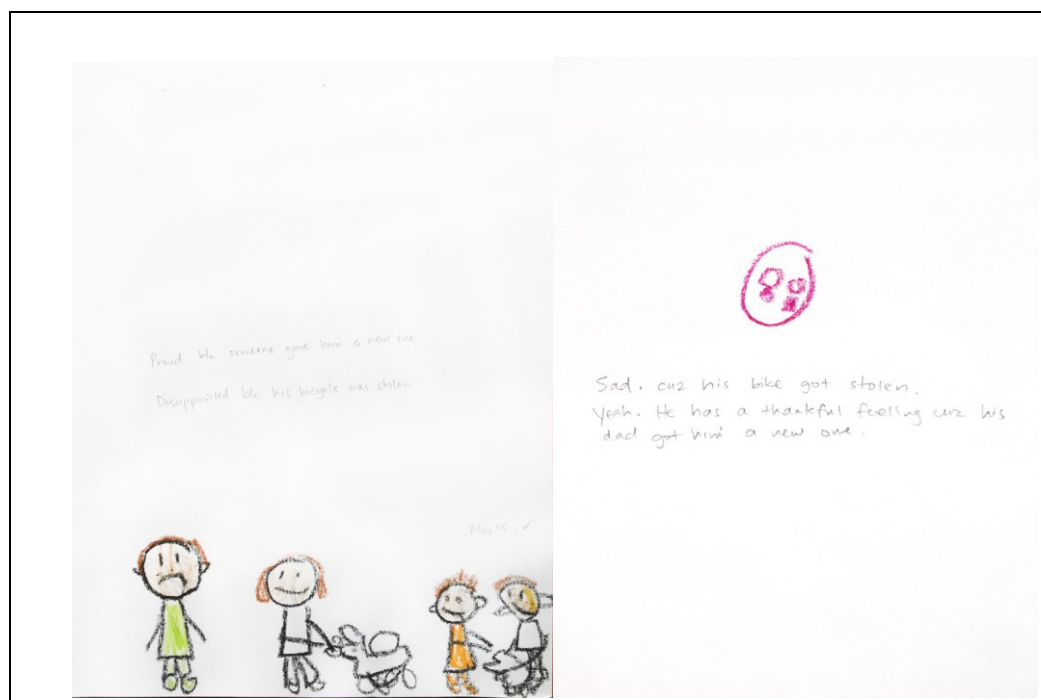


*Figure 6.* Negative emotion drawings by same child showing elaboration of causes from pretest (left) to posttest (right), respectively dictated as “Angry because I saw she was yelling. Take a deep breath and breathe in and out”; “Angry. That somebody hurt her. Count to 10 and breathe in 4 times.”

**Mixed emotion.** For the mixed emotion task, children were asked to identify the two emotions of a character in a story I read to them aloud. To identify a second emotion in the mixed emotions task, most children needed prompting (i.e., “Does he have any other feelings?”). At pretest, a similar number of children required prompts in both the experimental (87%) and control groups (86%). By posttest, however, fewer children in the experimental group (40%) needed the prompt compared to the control group, who had similar results as at pretest (79%).

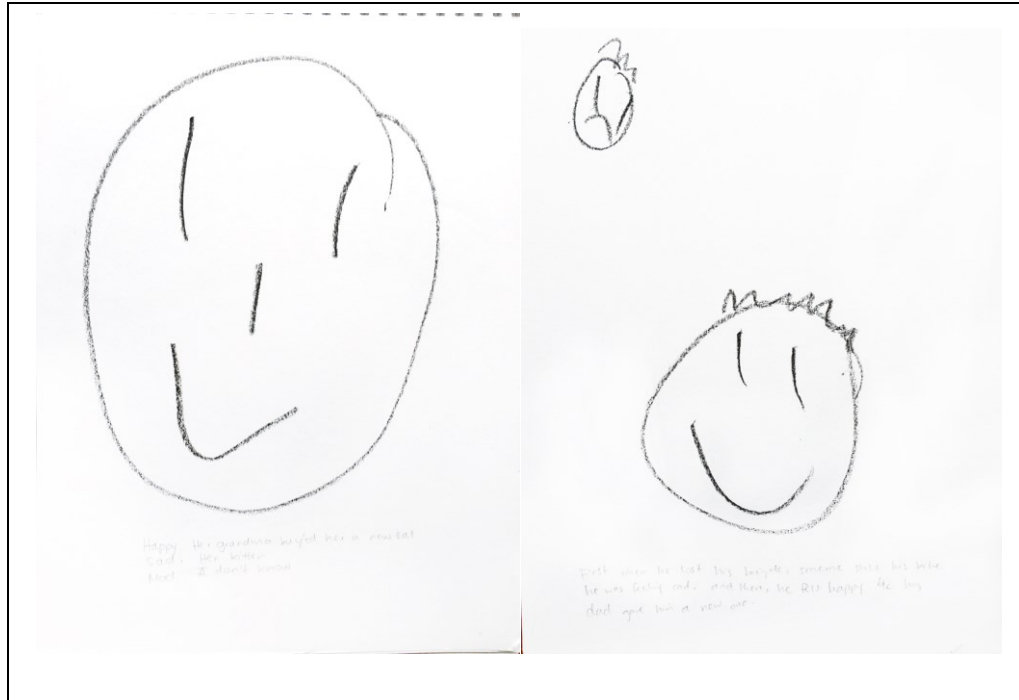
On the pretest measures, when labelling the mixed emotions, children generally used the appropriate words (i.e., captured the emotion in the picture) and these were the same words they

used to describe their own emotions in the self-portrait task (happy, excited, sad, mad or angry). On the posttest measures, while children mostly used the words ‘happy’ and ‘sad’ to describe the emotions, a few children occasionally used other emotion words: specifically, proud, thankful, and disappointed, as shown in Figure 7. Interestingly, these were words used during an intervention session based on the children's book, The Way I Feel (Cain, 2000), which described not only basic but complex emotions such as: proud, disappointed, and frustrated, to name a few.



*Figure 7.* Drawings by two children showing use of complex emotion words, respectively dictated as “Proud because someone gave him a new one. Disappointed because his bicycle was stolen”; and “Sad cuz his bike got stolen. He has a thankful feeling cuz his dad got him a new one.”

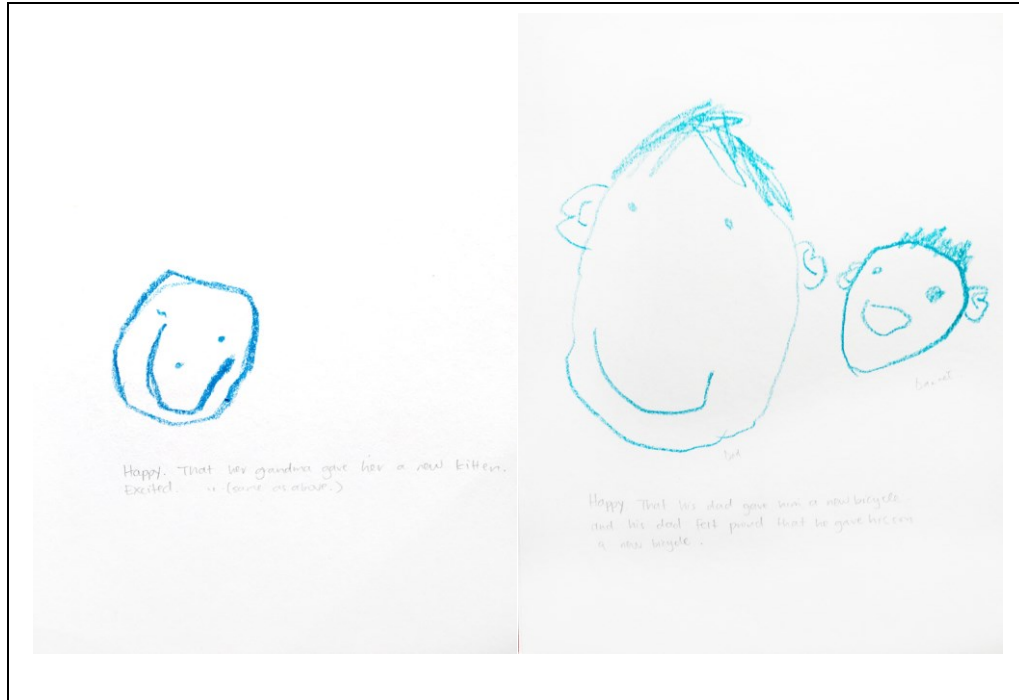
As was the case for the self-portrait and negative emotion tasks, some children also showed more elaborate causes during the mixed emotion task as shown in Figure 8.



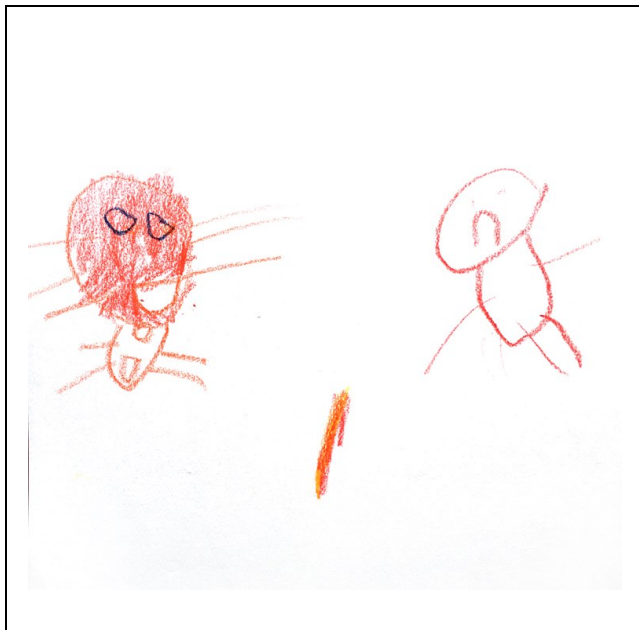
*Figure 8.* Mixed emotion portrait by same child showing elaboration of causes from pretest (left) to posttest (right), respectively dictated as “Happy. Her grandma buy’ed her a new cat. Sad. Her kitten. Mad. I don’t know”; and “First when he lost his bicycle, someone stole his bike he was feeling sad. And then, he felt happy because his dad gave him a new one.”

### **Additional Observations.**

**Perspective-Taking.** As discussed in the literature review, part of emotional awareness is being aware of the emotions of others. This skill was discussed in session 2 of the intervention. In the mixed emotion task at pretest, when asked what the character in the scenario felt, most children either indicated one emotion or two mixed emotions (Figure 9), and showed a capacity to understand others' emotions. It was interesting to see that one child took a different approach, describing the emotions of each character in the scenario (Figure 10), revealing the child's ability to take the perspective of one character then shift it to the other.



*Figure 9.* Mixed emotion portrait by same child showing perspective-taking from pretest (left) to posttest (right), respectively dictated as “Happy that her grandma gave her a new kitten. Excited that her grandma gave her a new kitten”; and “Happy that his dad gave him a new bicycle and his dad felt proud that he gave his son a new bicycle.”



*Figure 10.* Mixed emotion portrait by a child showing perspective-taking, dictated as “Sad. Her cat is going to be gone cuz he angry to her. [S]he needs his [=her] red cat. [S]he’s good. [S]he likes his [=her] new cat. And I don’t have an animal.”

## Museum Art Discussions

Since using museum art is a novel approach to eliciting discussion about emotions, the goal was to explore how successful it was with young children. The group discussions (recorded pre- and post intervention) were examined qualitatively, with a focus on children's responsiveness to abstract versus realistic paintings, the diversity of emotions and interpretations raised in the group, and the kinds of emotional associations children made with the art.

**Response to Realistic Paintings (Flowers).** At pretest and posttest, children made literal comments when asked to describe what they saw (“Flowers”, “dirt”, “grass”). The *Sunflowers* painting (pretest) generated responses from more children in the experimental group (9 of 12 children responded) than *Irises* (posttest) (4 of 11 children responded). Additionally, *Irises* evoked only literal comments, while *Sunflowers* inspired more interpretations about the flowers (“They’re happy”, “It died”) and associations of the flowers with other material that was not present in the painting (“There’s soil”, “There’s water so that the flowers grow”). In the control group, 3 of 12 children responded to the *Sunflowers* picture and 6 of 11 responded to the *Irises* picture. Their comments about each were mainly literal comments.

Based on the comments given, it seems that children gave more interpretative comments when a painting looked unique or unexpected. For example, in *Irises*, perhaps there is less to interpret because the photo is relatively similar to what a child would see in real life. However, in *Sunflowers*, the monochromatic painting seems to have invited poetic comments because of its yellow-only hues and drooping flowers (“They’re happy”, “Maybe there were ten suns, super hot and something dies”). In the control group, such interpretations were absent, possibly because no child made an initial interpretative comment that others could elaborate on.

Similarly, when I asked other questions, *Sunflowers* inspired more comments from the

children than *Irises*. For example, when asked how the painting made them feel, children responded with a variety of emotions and states for *Sunflowers* (“happy”, “excited”, “sad”, “sleepy”, “hot”, with 8 of 12 children responding), but only one emotion for *Irises* (“happy”, with 5 of 11 children responding). For both paintings, most children stated the cause of their emotion was what they saw or interpreted in the painting (“It makes me sad because the flowers are dying”, “Happy because I’m smelling a flower”, “It makes you really happy because its so sunny”). A couple of responses were either imaginative (“Happy because the flowers bite me”) or based on emotions felt in real experiences (“Happy because like when you go to the park”). Also, in response to *Sunflowers*, some children gave causes not directly related to the subject matter (“It makes me sleepy when the sun is shining when they grow”, “Happy because like when you go to the park”), but in *Irises*, causes were more straight-forward (“Happy because it’s flowers”). In the control group, the majority of the emotions expressed for the two paintings was “happy”, while 2 children stated they felt ‘angry’. The majority of causes given for both happy and angry emotions was directly related to what they saw in the painting (“Mad because I don’t like flowers”, “Happy because flowers are beautiful”). The difference in feelings towards emotions also stirred up a conversation regarding individual preferences (Child 1: “Angry because I don’t like flowers”, Child 2: “Some people don’t like flowers, some people like them”, Child 3: “I don’t”, Child 4: “I do”).

Interesting to note, even though neither painting depicted a facial expression, children were able to associate colour and subject matter to an emotion and identify the cause of it. For all six paintings, at pretest, the emotions expressed were: happy (12), excited (1), sad (2), and funny (1). At posttest, the emotions expressed were happy (5), grumpy (1), grouchy (1), yucky (1), sad (1), scared (1), and exciting (1). While there were more emotion responses expressed at

pretest (16) than at posttest (11), there was a greater variety of emotion words used at posttest.

When children were asked to describe what *Sunflowers* reminded them of, they described an activity that evoked happiness (the most common emotion expressed when looking at the paintings). For example, in *Sunflowers*, children gave examples of possible real experiences that would be enjoyable (“It makes me think that I’m going to the pool”, “It makes me feel like my mom is gardening”). The subject matter also reminded children of either something really similar (“a garden”), or of someone (“my Mom”). In *Irises*, children also gave responses regarding related subject matter (“bean stalks”) and real experiences (“It can make you sneeze”). They also told imaginative stories related to the subject matter, but not particularly relating to an emotion (“There’s a bee, you cannot eat it, because there’s a bumblebee inside the flower and it can sting you”, “boat because the flowers are in a pile and I can sit on them and I can put them in the water and sail”). Imaginative stories also occurred in the control group. For example, one child said, “It feels like me living in a blue world because the flowers are blue.”

**Response to Impressionist Paintings.** There were similar findings for the impressionism paintings as there were in the realistic paintings. In *Soleil Levant* (pretest) and *Waterloo Bridge – The Sun in A Fog* (posttest), children gave all literal responses when asked what they saw. Children also labeled the emotions they felt when looking at the paintings and said the causes of their feelings were because of: the subject matter and what it reminded them of (“Happy because it feels like I’m in Wonderland because there’s water”, “It makes me sad because I throw the water and I fall down”, “It makes me happy because I can go fishing”), or of the appearance of the painting (“Grumpy because when I look at it, it’s so, it’s not clear, so it’s hard for me to see”). Children’s responses to the paintings were related to real experiences (“It makes me think of I’m jumping in a pool”), but as was the case for the *Irises* painting, they



sometimes told imaginary stories (“There’s a frog made a house and it’s a party for 3 days...because those green things look like their houses”).

**Response to Abstract Paintings.** When observing abstract paintings and asked to describe what they saw, children tended to attempt to interpret the abstractions in literal terms. For example, in both paintings, children described what they thought the abstract shapes were (in *Still Life with Guitar*, “guitar”, “wood”, “cat” and in *Fruit, Carafe and Glass*, “pom pom”, “eyeball” and “bird”). It is interesting to note that because the paintings were not realistic, children questioned the subject matter. For example, when *Still Life with Guitar* was shown at pretest, one child had a confused look and asked, “What is that?”. When another child said he saw a cat in the painting, another child asked, “A cat? Where?” Questioning and debate about the paintings only occurred when viewing the abstract paintings. Similar debates occurred in the control group as shown in the following exchange: Child 1 “I feel happy because I have food. That’s food”. Child 2 “It’s not food Aryaan, silly billy. It’s not cake. It’s art”. Child 1 “Eye”. Child 2 “That’s not an eye, that’s guitar”.

Perhaps similar to *Sunflowers* in its openness to interpretation, the abstract paintings caused children to feel a variety of emotions: “happy”, “sad”, “funny”, “exciting”, and “scared”. The causes children gave for these emotions were based on how they interpreted the subject matter (“Happy because I’m going to planet Saturn”, “Funny, because a square is singing [to] a guitar”, “Scared when I look at it, the eye looks scary”). Similar responses were provided in the control group: “Nervous because I don’t like it”, “Scared because the eyes looking at me”).

When asked to describe what the abstract paintings reminded them of, children gave a variety of responses. For example, when looking at *Still Life with Guitar*, children related the subject matter to a personal experience such as their school trips to see Sharon and Bram in

concert and to the local maple syrup farm (“The field trip when we went to the song place. There’s a guitar and I remember music”, “Makes me feel like the wood, the colour, is made out of maple syrup”). In these examples, the abstract art did not remind them of something else that was ‘happy’ as in the responses given for *Sunflowers*. Instead, the subject matter reminded them of something else they had seen or heard. However, in *Fruit, Carafe and Glass*, children also made up stories roughly pertinent to the subject matter, just like they had for *Irises* (“It’s funny because there’s a ball with an eyeball and with a rollerskate and with antenna it’s going to skate”, “It reminds me of that I’m going to die because I’m dead and I’m dying cuz that thing has two birds on it and it’s going to kill my head”). Similar responses were given in the control group: for example, “It reminds me of ghosts because of the shadow”.

### **Discussion**

This study investigated the effects of an intervention on kindergartener's emotional intelligence, or more specifically, emotional awareness. Emotional awareness is an important component of EI and of social-emotional competency as described in the developmental psychology literature, and is connected to other components such as regulating emotions and understanding the emotions of others. According to the theory of EI and research on social emotional development, there are intrapersonal and interpersonal benefits of developing EI. Studies show that social-emotional skills benefit children socially and academically; well adjusted children have better quality friendships, do better in school, are equipped to learn and can regulate their emotions in a healthy manner during stressful situations (Pahl & Barrett, 2007).

Although the use of art to foster EI is still an area with limited research, a few studies suggest that art might aid young children in developing EI. The present study examined an

intervention to raise the emotional awareness of kindergarteners through visual arts and dialogue. Learning about emotional awareness is a developmentally-appropriate expectation for kindergarteners. Emotional awareness is also included in the kindergarten curriculum in Ontario, the Canadian province where the study was carried out and where I have been a kindergarten teacher for the past nine years.

Participants were 30 children (ages 4 to 6 years) enrolled in kindergarten classes in a large suburb in Ontario, Canada. The design was quasi-experimental; children in one classroom formed the experimental group and children in a second classroom formed a control group. Children in the experimental group engaged in a 5-week intervention that focused on different skills of emotional awareness: naming positive and negative emotions and their causes, suggesting solutions to problems evoking anger or sadness, and identifying mixed emotions. During four of the sessions, I read a story or showed photos, discussing the emotions in each with the children. Children then drew a picture in a sketchbook related to the discussion and described their drawings to me. These activities were meant to engage the children in thinking, drawing, and talking about emotions. In the final session, children were engaged in a group discussion of emotions evoked by realistic and abstract museum paintings.

All participants from the two classrooms completed a pretest and posttest immediately before and after the intervention. The pre- and posttest measures were children's drawings and descriptions of (1) a self-portrait depicting how they felt, (2) a negative emotion experienced by a character in a photo, and (3) the mixed emotions experienced by a character in a story. A brief summary of the findings is provided below. The limitations of the study as well as the implications of the results in education are also explained.

### **Summary of Results**

The pre- and posttests were coded and scored for facial features depicted in the drawings and for the emotions, causes and, when applicable, the solutions in the children's descriptions. Contrary to my prediction, the ANCOVA did not reveal a significant group difference at posttest for the drawing score. Consistent with my hypothesis, there was a significant group difference at posttest for the description score, favouring the experimental group. However, it is important to note that the increase in score from pretest to posttest in the experimental group was small.

The lack of significant results on the drawing scores might have been partly due to a ceiling effect on some of the tasks. For the self-portrait, most children chose to draw a happy face and were capable of drawing the features easily (neutral eyes, upturned mouth), and thus the majority received full points. Also, on the mixed emotion task, children often attributed happiness to characters in a story and thus received maximum points for that part of the score (children were also asked about a second emotion but many did not provide one). On the other hand, most children did not receive full points for the 'negative' emotion (sad or mad) in the negative emotion and mixed emotion tasks drawings, as suggested by the mean scores of 1 or below for these tasks in both groups at pretest and posttest. Similarly, Cox (2005, as cited by Brechet et al., 2009) found that in a face completion task, children accurately depicted happiness by ages 4-5 and negative emotions later.

The higher scores in the experimental group for the descriptions might have been due to small improvements in elaborating the causes of emotions, observed in the descriptive statistics and the qualitative analyses. The qualitative analyses also revealed the nature of the causes children gave. The causes given for happiness were social about half the time, usually involving social interactions or relationships. This contrasts with the research by Denham and Zoller (1990), who found that children ages 3 to 5 stated only 30% of causes of happiness as social and

70% of causes as non-social. The difference in my findings might be because, in Denham and Zoller's study, children were discussing the causes of a puppet's emotion, allowing the causes of the emotions to be very open-ended. On the other hand, in the present study, children were in a social setting (i.e., the classroom) and talking about themselves. Therefore, their emotions and the causes of them would be pertinent to what had happened that very day, while children were surrounded by activities involving sharing and interacting with peers and teachers. Children also did not come from a single cultural group and this factor may have influenced their responses (i.e., children from some cultures may be more oriented to social relationships or to talking about these).

Another element of the description was labelling the emotion. To control for practice effects, two different pictures were used at pretest and posttest. One surprising finding was a decrease in accuracy in labelling negative emotions. This finding may have been due to greater ambiguity in the picture used at posttest, which some children interpreted as sad rather than angry. However, depending on the situation, both sad and angry emotions could be present. For example, in both negative tasks photos, a girl was upset for not possessing an object. Both sad and angry could be an appropriate answer, perhaps depending on the individual child's reaction. Individual differences in the emotions identified could also be because of the child's development or the expressions the child is exposed to from peers and adults. Young children have also been observed to confuse sadness and anger with each other (Denham, 2006) and are more accurate in labelling sad facial expressions than angry ones (Denham & Couchoud, 1990).

I also expected that children would improve on their ability to state a solution to a social problem. I found that children gave a variety of responses, some unexpected. However, since children are in a school setting, it is likely that teachers spend time talking to children about their

emotions (e.g., discussing solutions to their every day problems as they occur). In fact, in response to the question, “What could she do to feel better?” in the negative emotion task, many children suggested breathing in and out and counting. Perhaps teachers had talked about this strategy in class prior to the intervention. Whether children apply these steps in actual social problems is unknown.

In regards to the mixed emotion task, descriptive data showed that only 40% of children in the experimental group required a prompt at posttest to identify the mixed emotions in the given situation, versus 79% of the children in the control group. It thus appeared that children who were exposed to discussions of mixed emotions were more capable of identifying both emotions spontaneously. It was also interesting to note that a small number of children used words they had heard in the intervention (i.e., words for complex emotions) during the mixed emotion task at posttest, and took the perspectives of both characters in the story. The last finding is in line with Bretherton, Fritz, Zahn-Waxler, and Ridgeway (1986), who reported that 3- to 5-year-olds understand that two people may experience and assess the same emotional situation differently.

### **Museum Art Discussion**

I also examined children's responses to museum art (i.e., well-known paintings) in both the experimental and control groups, and both before and after the intervention period. These analyses were exploratory, since there are no studies to date on preschoolers' interpretations of museum art. Given that not all children were required to contribute to the discussions, but instead were free to participate as they wished, the data were analyzed qualitatively for overall patterns in the responses of children who chose to speak about the paintings.

One might expect children of the age studied to simply say what they see in a painting,

especially when given a realistic painting. This was the case in the present study, where children gave literal comments for the paintings. However, a painting that is more abstract and ‘unexpected’ in its aesthetics (colour, shape) is more open to interpretation and could evoke different kinds of responses by children. In the museum art discussions, I presented children with realistic, impressionist, and abstract paintings to see how they would respond. I found that most children gave literal interpretations of the realistic paintings (two paintings of flowers, one shown at pretest and one at posttest) and of the impressionist paintings (two water scenes). That is, children in both groups tended to name what they saw in the pictures at pretest and posttest. However, the children also associated the paintings with diverse emotions when prompted. For example, flowers were cited as a cause of happiness by one child, but as a cause of sadness by another child who believed the drooping flowers were dying. Others interpreted the colours in the painting: for example, associating yellow flowers with sunshine.

For the abstract paintings, most children tried to interpret the shapes in terms of objects they knew. Some then associated the object they 'saw' in the painting with a past experience (e.g., identifying one shape as a guitar and then relating it to a musical performance). Children also made diverse emotional associations. For example, some children described the paintings as "scary", while others associated the paintings with happy emotions despite the paintings' dark colours and questionable subject matter. Finally, some children's responses were creative, with some children telling an imaginative story that peers elaborated on, or a silly story, to incite laughter from their peers.

It seems that using museum paintings to invite children to talk about emotions is, at the very least, an interesting activity. Using museum paintings to discuss emotions also allowed children to hear what their peers felt and thought about the same painting. In fact, children

identified many emotions while observing the museum paintings. Children might be freer in their interpretations than older children and adults who reach similar conclusions regarding an emotion, even when it is evoked by abstract art (Jolley & Thomas, 1994).

In summary, museum paintings were a useful tool to foster emotional awareness: identifying and expressing one's own emotions, as well as emotions felt by other people and expressed through art (Mayer & Salovey, 1997, as cited by Mayer, Salovey, Caruso, & Cherkasskiy, 2011). Additionally, during the museum art discussions, children did not disagree with or object to the expressed emotions of their peers, creating a safe environment for children to discuss their emotions freely. This finding is in accordance with the Yale Centre for Emotional Intelligence and Botin Foundation education program, in which the developers propose that using artwork to discuss emotions not only encourages awareness of emotions in oneself and in others, but also provides a safe psychological distance for people to gain perspective about an emotion in a comfortable manner (Ivcevic, Hoffmann, & Brackett, 2014). These discussions are inviting in that they allow children to respond differently from one another without feeling like they are giving a wrong answer.

### **Contributions and Practical Implications**

Children in the experimental group outperformed the control group at posttest in describing their drawings of emotions, but not in drawing. While descriptive statistics showed that the experimental group improved only a little in describing emotions from pretest to posttest, the results are promising given that the intervention was brief (5 sessions of 30 minutes each). The study also revealed some interesting and unexpected findings. For example, in both the experimental and control groups, most children chose to draw a happy self-portrait at pretest and posttest. In addition, the study provided insight into what makes children happy; nearly half of



the causes they gave were social, for example. The prompts I gave during the tasks also proved useful in eliciting children's knowledge of emotions, and could be used by other teachers to explore the emotions of children in their classroom.

The study also was an informative contribution to my teaching practice and could have implications for other teachers. For example, the drawing score results informed me that a more explicit lesson on how to draw sad and angry facial expressions could be helpful to children, and could also be a good starting point to discuss and differentiate negative emotions. The study also showed that discussion of mixed emotions is appropriate for children this age. Finally, the study showed that children relied on a relatively small set of words for emotions, and could benefit from learning words to express a wider variety of emotions. This might be particularly interesting to pursue in groups of children like the one here, where most children were exposed to languages other than English at home.

It is also important to note that emotional awareness is a gradual process that requires continued instruction throughout the year rather than only during a 5-week intervention session. Having said this, emotional awareness is a critical skill that develops throughout a child's educational years as more complex emotions and situations arise in a child's life. Children would benefit from activities such as the ones in the present study to explore and discuss emotions explicitly and artistically. Further research on interventions and art activities to promote emotional awareness would be useful to teachers to support their students' social emotional skills.

### **Limitations and Future Directions**

The study utilized existing classes as the two groups rather than randomly assigning the children. A quasi-experimental design using intact classes was less disruptive to the classrooms

and more feasible to implement as the school year was approaching its end. However, the quasi-experimental design meant that differences between the classes might have influenced the results. Additionally, the design did not allow me to tease apart the effects of the drawing versus the discussion during the intervention. To isolate the effects of drawing alone, one would need three intervention groups: one that engages in drawing only, another that engages in discussion only, and another that engages in both drawing and discussion. Secondly, there was insufficient time to conduct classroom observations. Observing the classrooms prior to the study may have led to procedures that built more closely on what children in the two classes already knew. Finally, not all parents gave consent, and eligible participants were uneven in terms of the numbers of boys and girls (only in the control group). In summary, an experimental design with balanced numbers of boys and girls in each group and preliminary observations to refine the intervention could be interesting to pursue in future research.

My study in combination with research just published by the Yale Centre for Emotional Intelligence and the philanthropic Botín Foundation (Ebert, Hoffmann, Ivcevic, Phan, & Brackett, 2015) indicates some interesting directions for further study. In the Ebert et al. study, children participated in a 6-session workshop focused on teaching the recognition and labeling of emotions through observing and creating art. After the workshop, children were found to have greater knowledge of how emotions could be used to create art, facilitate thinking, and problem-solve in everyday experiences. This study parallels my study in that visual arts (observing art and creating art) were used as a medium to teach an emotional skill. However, while my study focused on a different skill each session, the Yale intervention organized the intervention around emotions, focusing on a different emotion each session for five sessions. It could be interesting to contrast my approach with the one taken by the Yale Centre.

Also, the art created by children in the Yale study was more open-ended than in my study; the art could be abstract or realistic (e.g., self-portrait, scene) and could be created from a variety of available materials. Children were also instructed to explore the materials prior to creating art, to prevent them from doing the first thing that comes to mind, which was found to inhibit creativity (Ebert, Hoffmann, Ivcevic, Phan, & Brackett, 2015). In contrast, in my study children were more constrained. A more open-ended and individualized approach might allow children to explore emotions more fully, while retaining the focus in the present study on art as a means for fostering emotional awareness.

## References

- Best Start Expert Panel on Early Learning (2007). *Early learning for every child today: A framework for Ontario early childhood settings*. Toronto, Ontario: Ministry of Children and Youth Services.
- Brechet, C., Baldy, R., & Picard, D. (2009). How does Sam feel?: Children's labeling and drawing of basic emotions. *British Journal of Developmental Psychology*, 27, 587-606. doi:10.1348/026151008X345564
- Bretherton, I., & Beeghly, M. (1982). Talking about internal states: The acquisition of an explicit theory of mind. *Developmental Psychology*, 18, 906-921. doi:10.1037/0012-1649.18.6.906
- Bretherton, I., Fritz, J., Zahn-Waxler, C. & Ridgeway, D. (1986). Learning to talk about emotions: A functionalist perspective. *Child Development*, 57, 529-548. doi:10.2307/1130334
- Brouillette, L. (2010). How the arts help children to create healthy social scripts: Exploring the perceptions of elementary teachers. *Arts Education Policy Review*, 111, 16-24. doi:10.1080/10632910903228116
- Cain, J. (2000). *The way I feel*. Seattle, WA: Parenting Press
- Coppock, V. (2007). It's good to talk! A multidimensional qualitative study of the effectiveness of emotional literacy work in schools. *Children & Society*, 21, 405-419. doi:10.1111/j.1099-0860.2006.00072.x
- Denham, S.A. (2006). The emotional basis of learning and development in early childhood education. In B. Spodek & O. N. Saracho (Eds.), *Handbook of research on the education of young children* (pp. 85-104). Mahwah, NJ: Lawrence Erlbaum Associates.

- Denham, S.A. & Couchoud, E. (1990). Young preschoolers' understanding of emotions. *Child Study Journal*, 20, 171-192. doi:10.1037/0012-1649.30.6.928
- Denham, S.A. & Zoller, D. (1990). When my hamster died, I cried": Preschoolers' attributions of the causes of emotions. *The Journal of Genetic Psychology*, 152, 371-373. doi:10.1080/00221325.1991.9914693
- Denham, S.A., Zinsser, K., & Bailey, C.S. (2011). Emotional intelligence in the first five years of life. In M. Lewis (Topic Ed.), R.E. Trembay, M. Boivin, & R. DeV. Peters (Eds.), *Encyclopedia on early childhood development* [online]. Montreal: Centre of Excellence for Early Childhood Development and Strategic Knowledge Cluster on Early Child Development, 1-7. Retrieved August 16, 2016, from <http://www.child-encyclopedia.com/emotions/according-experts/emotional-intelligence-first-five-years-life>.
- Ebert, M., Hoffmann, J.D., Ivcevic, Z., Phan, C. & Brackett, M.A. (2015). Teaching emotion and creativity skills through art: A workshop for children. *The International Journal of Creativity & Problem Solving*, 25, 23-35. doi:10.1111/j.1467-6494.2007.00437.x
- Ekman, P. (1993). Facial expression and emotion. *American Psychologist*, 48, 384-392. doi:10.1037//0003-066x.48.4.384
- Fabes, R. A., Eisenberg, N., Nyman, M., & Michaelieu, Q. (1991). Children's appraisals of others' spontaneous emotional reactions. *Developmental Psychology*, 27, 858-866. doi:10.1037/0012-1649.27.5.858
- Grewal, D., & Salovey, P. (2006). Benefits of emotional intelligence. In M. Csikszentmihalyi & I. S. Csikszentmihalyi (Eds.), *A life worth living: Contributions to positive psychology* (pp. 104-119). Oxford, UK: Oxford University Press.
- Hall, E. (2009). Mixed messages: the role and value of drawing in early education. *International*

- Journal Of Early Years Education*, 17, 179-190. doi:10.1080/09669760903424507
- Hyson, M. (2004). *The emotional development of young children: Building an emotion-centered curriculum*. New York, NY: Teachers College Press.
- Ivcevic, Z., Hoffmann, J., Brackett, M. (2014). Creativity, emotions and the arts. In B. Heys (Ed.), *Arts and emotions – Nurturing our creative potential* (pp. 7-23). Santander, Spain: Botín Foundation.
- Jolley, R. P., & Thomas, G. V. (1994). The development of sensitivity to metaphorical expression of moods in abstract art. *Educational Psychology*, 14, 437-450. doi: 10.1080/0144341940140406
- Joseph, G., & Strain, P. (2003). Comprehensive evidence-based social-emotional curricula for young children: An analysis of efficacious adoption potential. *Topics in Early Childhood Special Education*, 23, 65-76. doi:10.1177/02711214030230020201
- Kocer, H. (2012). The evaluation of the art activities applied in preschool education programmes in terms of self-expression opportunity given to child. *Procedia-Social and Behavioral Sciences*, 51, 289-295. doi:10.1016/j.sbspro.2012.08.161
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). Emotional intelligence: Theory, findings, and implications. *Psychological Inquiry*, 15, 197-215. doi:10.1207/s15327965pli1503\_02
- Mayer, J. D., Salovey, P., Caruso, D. R. & Cherkasskiy, L. (2011). Emotional intelligence. In R. J. Sternberg & S. B. Kaufman (Eds.), *The Cambridge handbook of intelligence* (pp. 528-549). New York, NY: Cambridge University Press
- Ontario Ministry of Education (2010). *The full-day early learning -- kindergarten program: 2010-11*. Toronto, ON: Ministry of Education.

- Ontario Ministry of Education (2011). *Full-day kindergarten*. Retrieved November 6, 2015, from <http://www.edu.gov.on.ca/kindergarten/>
- Pahl, K., & Barrett, P. (2007). The development of social-emotional competence in preschool-aged children: An introduction to the Fun Friends Program. *Australian Journal of Guidance & Counselling, 17*, 81-90. doi:10.1375/ajgc.17.1.81
- Payton, J., Weissberg, R. P., Durlak, J. A., Dymnicki, A. B., Taylor, R. D., Schellinger, K. B., & Pachan, M. (2008). *The positive impact of social and emotional learning for kindergarten to eighth-grade students: Findings from three scientific reviews*. Chicago, IL: Collaborative for Academic, Social, and Emotional Learning.
- Rivers, S. E., Tominey, S. L., O'Bryon, E. C., & Brackett, M. A. (2013). Developing emotional skills in early childhood settings using Preschool RULER. *The Psychology of Education Review, 37*, 19-25.
- Rosier, J. T., Locker, Jr., L., & Naufel, K. Z. (2013). Art and memory: An examination of the learning benefits of visual-art exposure. *North American Journal of Psychology, 15*, 265-278.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality, 9*, 185-211. doi:0.2190/DUGG-P24E-52WK-6CDG
- Short, C., De Ornellas, K., & Walrath, R. (2011). Draw-A-Person test. In S. Goldstein & J. A. Naglieri (Eds.), *Encyclopedia of child behavior and development* (pp. 523-524). New York, NY: Springer US.
- Shuster, C. (2000). Emotions count: scaffolding children's representations of themselves and their feelings to develop emotional intelligence. In *Issues in Early Childhood Education: Curriculum, Teacher Education, & Dissemination of Information*. Proceedings of the

- Lilian Katz Symposium (pp. 285-293). Champaign, IL.
- Upitis, R. (2011). Arts education for the development of the whole child. Prepared for the Elementary Teachers' Federation of Ontario, Canada.
- Wallin, K., & Durr, M. (2002). Creativity and expressive arts in social emotional learning. *Reclaiming Children And Youth, 11*, 30-34.
- Weinberger, L. A. (2002). Emotional intelligence: Its connection to HRD theory and practice. *Human Resource Development Review, 1*, 215-243. doi:10.1177/15384302001002005
- Widen, S. C., & Russell, J. A. (2003). A closer look at preschoolers' freely produced labels for facial expressions. *Developmental Psychology, 39*, 114-128. doi:10.1037//0012-1649.39.1.114
- Wilson, R. L., & Wilson, R. (2015). Emotional development in early and middle childhood. In R. L. Wilson (Ed.), *Understanding emotional development: Providing insight into human lives* (pp. 151-168). Florence, KY: Taylor and Francis.
- Winner, E. (2007). Visual thinking in arts education: Homage to Rudolf Arnheim. *Psychology of Aesthetics, Creativity, and the Arts, 1*, 25-31. doi:10.1037/1931-3896.1.1.25



## Appendix A

### Parent Letter Experimental Group

Dear Parents/Guardians,

My name is Diana Kwong and I am a teacher at [REDACTED]. I have taught at the school for four years and in kindergarten for two of those years. Currently, I am on leave to complete a master's degree in the Child Studies program of the Department of Education at Concordia University. I am presently working on my thesis research project, *Using Art and Dialogue to Promote the Emotional Awareness of Kindergarteners*. The goal of this project is to see whether art activities and discussions raise young children's understanding of their own feelings and the feelings of others. I am interested in this topic since some studies have shown that children's emotional awareness is related to their readiness for school and their relationships with peers.

To carry out the project, I will visit your child's classroom seven times over a period of six weeks. During the visits, I will ask children to listen to some stories read aloud, look at photos of social situations and museum art, draw pictures of their feelings, and describe their pictures. After the children draw, I will ask them to tell me about their drawings individually and will record their responses with an audio recorder. Three group discussions will also be video recorded. These activities are described in greater detail in the attached consent form.

I will arrange for the group discussions and individual drawing tasks to take place in your child's classroom during regular class programming. If you do not wish to give permission, your child will still be invited to participate in the activities, but no information will be gathered from your child. If you do give permission, the information I collect from your child will be used to determine his or her emotional awareness before and after all the activity sessions. Children's results will not play any role in the report card.

When the research is complete, the results will be reported in my thesis and possibly published. These publications could include samples of drawings and drawing descriptions by children. At all times, the names of the children will remain confidential. The audio and video recordings will be heard and seen only by me, my supervising professor, and possibly one of my supervisor's research assistants.

Please sign and return the attached consent form to your child's teachers indicating whether you wish to allow your child to participate in the study or not. If you have any concerns or questions, please do not hesitate to contact me, [di\\_kwong@education.concordia.ca](mailto:di_kwong@education.concordia.ca), or my supervisor Dr. Diane Pesco, Concordia University, [dpesco@education.concordia.ca](mailto:dpesco@education.concordia.ca), phone 514-848-2424 ext. 7338. The school principal is also aware of my project.

Sincerely,

Diana Kwong

**Appendix A (continued)**

## Parent Letter Control Group

Dear Parents/Guardians,

My name is Diana Kwong and I am a teacher at [REDACTED]. I have taught at the school for four years and in kindergarten for two of those years. Currently, I am on leave to complete a master's degree in the Child Studies program of the Department of Education at Concordia University. I am presently working on my thesis research project, *Using Art and Dialogue to Promote the Emotional Awareness of Kindergarteners*. The goal of this project is to see whether art activities and discussions raise young children's understanding of their own feelings and the feelings of others. I am interested in this topic since some studies have shown that children's emotional awareness is related to their readiness for school and their relationships with peers.

To carry out the project, I will visit your child's classroom twice over a period of six weeks. During the visits, I will ask children to listen to some stories read aloud, look at s of social situations and museum art, and draw pictures of their feelings. After the children draw, I will ask them to tell me about their drawings individually and will record the children's responses with an audio recorder. One group discussion will also be video recorded. These activities are described in greater detail in the attached consent form. I will arrange the group discussions and individual drawing tasks inside your child's classroom during regular class programming.

The information I gather in these activities will be used to see the children's progress in emotional awareness in comparison to children in a different classroom who will engage in an elaborated version of the activities during the same few weeks. However, one or more activities to teach children about emotional awareness will be done with your child's class before the end of the school year so that they can benefit from the study. Children's results will not play any role in the report card. If you do not wish to give permission, your child will still be invited to participate in the activities, but no information will be gathered from your child.

When the research is complete, the results will be reported in my thesis and possibly published. These publications could include samples of drawings and drawing descriptions by children. At all times, the names of the children will remain confidential. The audio and video recordings will be heard and seen only by me, my supervising professor, and possibly one of my supervisor's research assistants.

Please sign and return the attached consent form to your child's teachers indicating whether you wish to allow your child to participate in the study or not. If you have any concerns or questions, please do not hesitate to contact me, [di\\_kwong@education.concordia.ca](mailto:di_kwong@education.concordia.ca), or my supervisor Dr. Diane Pesco, Concordia University, [dpesco@education.concordia.ca](mailto:dpesco@education.concordia.ca), phone 514-848-2424 ext. 7338. The school principal is also aware of my project.

Sincerely,  
Diana Kwong

## Appendix B

### Pretest and Posttest Procedures

#### Assent procedures/script.

Introductory Session: *Hi, my name is Ms. Kwong. I would like you to do some activities about feelings like drawing, looking at pictures and then talking about the feelings in them. That way I can see what children are learning and know about feelings. When we are doing this, you can tell your teacher or me if you want to stop or do it later, or not do it at all. Does this sound like something you want to do?*



Below, each activity involved in the study is presented with the initial prompts (before drawing) and follow-up (to elicit description of drawing). As the prompts show, the children will be asked to give assent to talk about their drawing each time. Children will also be reminded in each session that they can tell me or the teacher if they do not wish to do the drawing activities or if they want to wait to do them (see assent script above).

#### 1) Self Portrait:

- Prompt: *Draw your face with how you feel today and then draw what made you feel like that.*
- Follow-up: *Are you ready to tell me about your picture? What feeling is in your picture? What made you feel that way?*
- Transcribe words and audio record.

#### 2) Photo of Negative Emotion:

- Show photo. *I'm going to show you a photo. Look carefully because I'm going to ask you to draw how the boy/girls felt. (5 seconds, put it away) Ready? Now I'm going to put the photo away.*
- Prompt: *Draw how the girl/boy felt on a face.*
- Follow-up: *Are you ready to tell me now about your picture? How did the girl/boy in the picture feel? What made her/him feel that way? (Put photo on table. Can use photo for reference)*
- Follow-up #2: If child describes a negative emotion, ask: *What could the girl/boy do to feel better?*
- Transcribe words and audio record

Pretest Photo	Posttest Photo
	

### 3) Scenario of Mixed Emotions:

- Prompt: *I'm going to read you a story and then ask you to draw something from the story.*
- Read scenario.
- Prompt: *Draw the feelings the boy/ girl felt about getting \_\_\_\_\_. You can use more than one face if you want to show more than one feeling.*
- Follow-up: *Are you ready to tell me now about your picture? How did the girl/boy in the story feel? What made her/him feel that way?*
- Follow-up #2: *If child does not draw 2 feelings, ask: Does she/he have any other feelings?*
- Transcribe words and audio record.

Pretest Scenario	Posttest Scenario
<i>Bonnie had a kitten she really liked a lot. She lost her kitten, so her grandmother gave her a new kitten. How does Bonnie feel about getting the kitten?</i>	<i>Daniel had a bicycle he really liked a lot. The bicycle got stolen, so his dad gave him a new bicycle. How does Daniel feel about getting the bicycle?</i>

## Appendix C

### Museum Art Procedures

Prompt: *You will be looking at pictures and talking about the feelings in them. After, I will ask you some questions to see what children are learning and know about feelings. When we are talking about the pictures, you can raise your hand to share if you want to.*

#### Museum Art

- Show picture.
- Prompt: *What do you see? How does it make you feel? What does it make you think of?*
- Audio and video record.

#### Pretest Pictures



#### Posttest Pictures



## Appendix D

### Intervention Script

Before each intervention session:

Prompt: *I would like you to do some activities about feelings like we did last time I was here. I will ask you to draw and look at pictures and talk about the feelings in them. After, I will look at everybody's drawings and I will listen to what you say about the drawings. That way I can see what children are learning and know about feelings. When we are doing any of the drawing and talking activities, you can tell your teacher or me if you want to stop or wait until later to do them. Or, if you do not want to do them at all, you can tell us that too at any time. Does this sound like something you want to do with me?*

Objective	Materials	Dialogue	Art or response by child
1. Identify the facial expressions of emotions in self and others (in the story).	Book: <u>The Way I Feel</u> (Cain, 2000) Mirrors	Read book. Discuss emotions and the facial features that characterize each expression. Use mirror to view own facial expressions.	<p>Prompt: <i>We just talked about all these feelings from the book (show pictures). Can you draw a face with one of the feelings? If you want, you can use the mirror to remember how the feeling looks. (Give example.)</i></p> <p>Art: Self-portrait of an emotion of their choice using the mirror.</p> <p>Follow-up: <i>Do you want to tell me now about your picture? What feeling is in your picture? What made you feel that way?</i></p> <p>Transcribe words and audio record.</p> <p>Share drawing with peer.</p>
2. Identify the cause of a negative or positive emotion.	Photos of a character in a situation that evokes a negative or positive emotion	Discuss emotions expressed in photos. Discuss possible causes of emotion.	<p>Prompt: <i>Think of a time when you felt one of these feelings. (Show photos.) What made you feel like that? (Remind them of example given in dialogue.) Draw your face with the feeling and then draw what made you feel like that.</i></p> <p>Art: Drawing of a facial expression and the situation that caused them to feel that emotion.</p> <p>Follow-up: <i>Do you want to tell me now about your picture? What feeling is in your picture? What made you feel that way?</i></p> <p>Transcribe words and audio record.</p>



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Share drawing with peer.



3. Generate possible solutions to a problem that caused a negative emotion.

Photos of situations where character encounters a problem

Discuss negative emotions expressed in photos.  
Discuss response to negative emotion (solution).

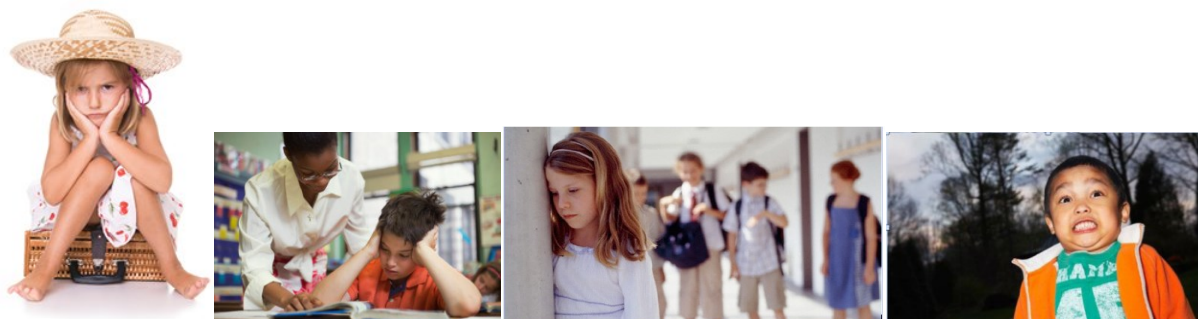
Prompt: *Think of a time when you had a problem that made you feel badly like this character. (Show photos.) What could you do to feel better about the problem? Draw your face with the feeling. Then, draw the problem and what you did to feel better.*

Art: Drawing of a problem that caused a negative emotion and the solution to the problem.

Follow-up: *Do you want to tell me now about your picture? What feeling is in your picture? What made you feel that way? What did you do to feel better?*

Transcribe words and audio record.

Share drawing with peer.



4. Express mixed feelings.

Scenarios where children may feel mixed emotions

Discuss the idea of having mixed emotions about something.

Prompt: *Think of a time that made you feel both a happy and unhappy feeling. Draw the feelings on a face and then draw what made you feel like that.*

Art: Drawing of mixed emotions and something that causes them.

Follow-up: *Do you want to tell me now*

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*about your picture? What feelings are in your picture? What made you feel that way?*

Transcribe and audio record.

Share drawing with peer.

*Eliana goes to the library with her best friend Sophie. Sophie borrows the book that Eliana wants. How does Eliana feel about Sophie coming to the library?*

*Michael has a puppy that he likes a lot. The puppy wrecks one of Michael's favourite toys. How does Michael feel about the puppy?*

*Jason is playing on the swings at the park. He plays too long and has to walk home alone in the dark. How does Jason feel about playing at the park?*

*Fatima forgot to bring her lunch. Her friend gave her half a sandwich. How does Fatima feel about lunch time?*

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- |   |                            |  |  |
|---|----------------------------|--|--|
| 5. Elicit discussion of emotions through looking at museum art. | Images of museum paintings | Discuss emotions portrayed in the artwork. | Prompt: <i>Look at the museum art. What do you see? How does it make you feel? What does it make you think of?</i> |
|---|----------------------------|--|--|

Response: Discussion of emotions.

Audio and video record.

Share drawing with peer.

